REPORT RESUMES

ED 020 423 08 VT 005 451

READINGS IN DISTRIBUTIVE EDUCATION--THE PROJECT PLAN OF INSTRUCTION AND RELATED TEACHER EDUCATION, SELECTED PAPERS FROM THE NATIONAL SEMINAR IN DISTRIBUTIVE EDUCATION (MICHIGAN STATE UNIVERSITY, 1967). PROJECT REPORT NO. 5.

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REPORT NUMBER BR-7-0489 PUB DATE 68
GRANT OEG-3-7-070489-3128
EDRS PRICE MF-$0.75 HC-$6.96 172P.

DESCRIPTORS- *PROJECT TRAINING METHODS, *DISTRIBUTIVE EDUCATION, *TEACHER EDUCATION, *TEACHING METHODS, EDUCATIONAL OBJECTIVES, PROGRAM PLANNING, COOPERATIVE EDUCATION, STUDENT EVALUATION, PROGRAM DEVELOPMENT, STUDENT PROJECTS, JOB SKILLS, MODELS, INSTRUCTIONAL MATERIALS, EDUCATIONAL FACILITIES, EQUIPMENT, STATE DEPARTMENTS OF EDUCATION, INSERVICE TEACHER EDUCATION, TEACHER EDUCATORS, TEACHER ROLE, *SEMINARS, OCCUPATIONAL CHOICE, CURRICULUM RESEARCH, TEACHER BEHAVIOR, SPEECHES,

THE PURPOSE OF THE SEMINAR WAS TO ASSIST TEACHER EDUCATION STAFFS TO IDENTIFY, EVALUATE, AND RESPOND TO THE IMPLICATIONS OF THE VOCATIONAL ACT OF 1963 FROM WHICH SPRANG THE CONCEPT OF THE PROJECT PLAN OF INSTRUCTION. PAPERS DEVELOPED BY PRACTITIONERS AND PROFESSIONAL EDUCATORS IN THE FIELD OF MARKETING AND DISTRIBUTION ARE PRESENTED--(1) "AN OVERVIEW" BY K.L. ROWE, (2) "PROJECT TRAINING--ITS IMPACT ON PROGRAM DEVELOPMENT" BY E.L. NELSON, (3) "SIMILARITIES AND DIFFERENCES IN PROJECT AND COOPERATIVE TRAINING" BY M.V. MARKS, (4) "PROJECT METHOD IN EDUCATION" BY E.E. BAYLES, (5) "PROJECTS AND PROJECT STRUCTURE" BY H.E. SAMSON, (6) "DESIRED OUTCOMES OF PROJECTS" BY W.G. MEYER, (7) "DEVELOPMENT OF A MATRIX" BY H.E. SAMSON, (8) "VARIATIONS OF TIME AND PLACE PATTERNS IN PROJECT TRAINING" BY E.T. FERGUSON, (9) "USING APPROPRIATE EVALUATION TECHNIQUES" BY C.B. COAKLEY, (10) "USING APPROPRIATE MATERIALS AND MEDIA" BY H.R. CHESHIRE, (11) "THE UTILIZATION OF FACILITIES AND EQUIPMENT IN DISTRIBUTIVE EDUCATION PROJECT METHOD TRAINING" BY W.H. ANTRIM, (12) "A PHILOSOPHY OF TEACHER EDUCATION--TEACHING, RESEARCH OR SERVICE" BY P.G. HAINES, (13) "DISTRIBUTIVE TEACHER EDUCATION--ITS ROLE IN PROGRAM DEVELOPMENT" BY W.G. MEYER, (14) "GEARING THE TEACHER EDUCATION PROGRAM FOR TEACHING BY THE PROJECT METHOD" BY R.A. RUSH, (15) "RELATIONS OF TEACHER EDUCATION TO STATE STAFF" BY E.L. DORR, (16) "METHODS IN DISTRIBUTIVE TEACHER EDUCATION CLASSROOMS" BY R.D. ASHMUN, (17) "INSERVICE TEACHER EDUCATION" BY L.C. CRAWFORD, (18) "THE ROLE OF THE TEACHER EDUCATOR IN RESEARCH AND MATERIALS DEVELOPMENT" BY V.K. ELY, (19) "TEACHER BEHAVIOR AND TEACHER EDUCATION" BY T. WARD, AND (20) "THE CHANGING NATURE OF VOCATIONAL CHOICE" BY C.G. WRENN. (MM)

APR 5 1968

RESEARCH & DEVELOPMENT PROGRAM
in Vocational-Technical Education

artment of Secondary Education and Curriculum
MICHIGAN STATE UNIVERSITY

ED020423

READINGS IN DISTRIBUTIVE EDUCATION

The Project Plan of Instruction and Related Teacher Education

Selected papers from the 1967
National Seminar in Distributive
Education Sponsored by Michigan
State University and Arizona
State University

VT005451

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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READINGS IN DISTRIBUTIVE EDUCATION:

The Project Plan of Instruction and Related Teacher Education

Project Report No. 5

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1968
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The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare, Contract No. OEG-3-7-070489-3128. Contractors undertaking such projects under government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

SECTION I

INTRODUCTION

AN OVERVIEW*

One of the most dramatic changes in the development of programing for education in the field of marketing and distribution was brought about as a result of the Vocational Act of 1963.

The purpose of the National Seminar for Distributive Education Program Development Through Teacher Education conducted by Michigan State University in consortium with Arizona State University was to assist teacher education staffs to identify, evaluate and respond to the implications of this legislation from which sprang the concept of the project plan of instruction. It was, therefore, essential that changes be made in education for marketing and distribution in both pre-service and in-service teacher education programs. This seminar provided an opportunity for distributive teacher educators and associated state staff personnel to widen their knowledge, update their thinking and relate to demands of a dynamic teacher education program.

The objectives of the seminar were:

1. To build among teacher educators and associated state staff a deeper knowledge of the theory and nature of the project plan of instruction.

2. To create understanding of the project plan of instruction as it operates in the classroom and to draw from this understanding, awareness of the competencies needed by the classroom teacher.

3. To derive implications for distributive teacher education practices from an understanding of recent innovations and research in teacher education.

4. To improve the content and design of teacher education programs related to project plan teachers.

5. To determine needed adjustments in the organization, administration, and resource allocation of teacher education programs.

6. To assist institutions with plans for summer institutes for project plan teachers by developing greater awareness of teacher competency needs.

This publication of readings includes the papers presented by specialists in the field of distributive education, and by other leading educators. These papers give some idea of the range of topics and depth of thinking and the seriousness of each author in accepting the task and the challenge given him. It is impossible to convey on the printed page the sense of urgency and yet the dedication and enthusiasm displayed not only by the authors of the papers but also of the conferees who diligently worked throughout the seminar.

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* Prepared by Kenneth L. Rowe, Teacher Educator, Distributive Education, Arizona State University, who was the Associate Director of the National Seminar.

Under the challenge of change and the pressure of immediate action it is easy to lose sight of direction and sacrifice the labors of the past and present. However, at this seminar it was clear that no one proposed to discredit the best of the past in order to achieve and accept new developments; rather there was a clear sense of sound thinking, of building on the past with an awareness of need for growth and change to meet the demands of an expanding program.

Members of the seminar seemed to subscribe to the example by Edwin Nelson in his paper entitled "Project Training--Its Impact on Program Development" which is included in this publication. Nelson said, "the addition of project training to the distributive education program is like adding a room to a house because the family has outgrown its present facilities or wishes to enhance the value and versatility of the home. The prior structure continues to have utility as originally intended even though the activity of building an addition to the house receives, at the moment, full attention and priority by the household members. When the room is completed, it will function as part of the whole and, if properly designed and executed, it will appear as though it has been part of the original construction."

The reader will note that there is some controversy and evidence of differing opinions and schools of thought throughout this book of readings. This should be expected since the authors are outstanding thinkers and leaders in their area of specialization. It would be not only unique but probably unprecedented if they arrived at total agreement on every aspect of the subject at hand.

Ernest Bayles, for example, in his paper entitled "Project Method in Education" suggests a definition for projects as an educational method that is much broader than the concept as defined by Mary Marks. Bayles goes on to say that "to be a project a curricular unit must be both comprehensive and educationally significant. It should be such as reasonably to comprehend or include a variety of useable principles and provide both incentive and opportunity for them to be well learned. Moreover, it is to be noted that they will be learned in their natural settings--in the contexts wherein they will henceforth be used."

Marks points out that "project students are a strong partner in contracts developed for their training. It is understood that paid, directed work experiences will be part of one or more projects and that there is no set time within which these must begin."

Marks also points out that project training as viewed in distributive education will allow students to have "learn by doing" experiences, but it is not a requirement. " These students also have learning experiences which simulate actual job problems or strengthen personal deficiencies," according to Marks.

Samson states that "as important as the administrative operation of the program might be, the classroom is still the center of effective distributive education. Educational complexity has been compounded in the distributive education field by the injection of a new and somewhat different form of teaching-learning construct generally called "project training."

In the section of Samson's paper which includes definitions and concepts of projects peculiar to distributive education, he gives a definition of projects as defined by the Dictionary of Education: "Project: A significant, practical unit of activity having educational value and aimed at one or more definite goals of understanding; involves investigation and solution of problems and frequently, the use and manipulation of physical materials; planned and carried to completion by the pupils and teacher in a natural, "real-life" manner." (Good-1959, p. 421).

Samson goes on to suggest "that perhaps the term "project" was attached too quickly and another term such as intensified laboratory should have been used to designate the alternative pattern of cooperative education."

It is apparent from the above points of view that distributive educators interpret the project method differently and yet there seems to be a thread of understanding among the distributive education authors who as a group differ somewhat with Bayles' concept of the project method. The reader is cautioned then to read each paper included carefully, recognizing the purpose of that paper and attempt to think through the concept presented in relation to the purpose of the total distributive education program and its objectives. One cannot stress enough the statement at the conclusion of the paper by Ernest Bayles when he said, "I see no reason that distributive education could not make good use of the project idea, if only it is clearly understood and kept in mind that project method is indeed a method. It is not a philosophy or a program, for it seemingly suffers when stretched to include ends as well as ways and means."

The intent of this publication is not to predict trends, necessarily, but to present an assembled collection of "searching papers" developed by practitioners and professional educators in the field of education. It is hoped that the publication will be thought-provoking as well as a centralized source of the current thinking and philosophy of leaders in the field of marketing and distribution.

Project Training--Its Impact On Program Development*

Project training in distributive education represents a promising technique in preparing persons for employment in distribution and marketing. Joining cooperative training as a principal method in achieving vocational purposes, project training provides the needed flexibility in program design--needed if distributive education is to make a greater impact upon the manpower requirements in the extensive field of distribution.

THE CONCEPT OF PROJECT TRAINING

As conceived for use in distributive education, project training combines classroom instruction with supervised and coordinated laboratory activities related to the distributive occupational area in which the student is preparing for employment. Project training, then, is comparable to cooperative training in that each provides the distinguishing participation experiences which makes distributive education vocational.

As a basis for your deliberations and work during this seminar, we ask that you view project training as representing that portion of the total instructional program that is now apportioned to cooperative training. It is for this phase of the instructional sequence with which this seminar is concerned. If the laboratory concept of cooperative training is educationally sound, then it follows that the void left when employment is not used on a regular basis must necessarily be filled by some other means. For purposes of this institute, we must also assume that project training draws upon the same content as does cooperative training. The unique distinction between the program of studies of a project student and a cooperative student is in the manner they find expression in applying the instruction.

Since 1963, project training has been given visibility at various professional meetings because there was an urgency in establishing a philosophical base for operating program stimulated by contempory legislation. To offer an analogy, it is like adding a room to a house because a family has outgrown its present facilities or wishes to enhance the value and versatility of the home. The prior structure continues to have utility as originally intended even though the activity of building an addition to the house receives, at the moment, full attention and priority by the household members.

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* Prepared by Edwin L. Nelson, Head, Distributive Education, State Vocational Services Branch, Division of Vocational & Technical Education, U.S. Office of Education for the 1967 National Seminar in Distributive Teacher Education

When the room is completed, it will function as part of the whole and, if properly designed and executed, it will appear as though it has been part of the original construction. This, I believe, is what we are saying about distributive education. The cooperative training "facility" in no way diminishes in importance because we see the necessity of finding a way to adjust to an ever expanding program. What we are doing is simply adding a useful and valuable method to our on-going program. Properly carried out, project training will contribute to the effectiveness of the total structure of distributive education.

If I might take the liberty of paraphrasing the statement of purpose of the Vocational Education Act of 1963, we might summarize project training as follows:

> "It is the purpose of project training to extend the capabilities of distributive education so that persons enrolled for full-time study will have ready access to an option of vocational application of instruction, through project participation, which is realistic and meaningful in light of their occupational objectives and which is suited to their needs, interests, and ability in developing employment qualifications."

Briefly, then, this reviews the prevailing concept of project training. It is for you to seek confirmation of this concept through the project training "experience" planned for this seminar. Your honest appraisal of the strength of project training will be a deciding force in determining how responsive distributive education will be to its new opportunity.

CONDITIONS FOR SUCCESS

At this point in time, we can only ascertain the probable impact of project training on program development. Before we can raise our hopes and expectations it will be important to recognize certain conditions which must first be met if project training is to become a viable force in distributive education. Its impact on program development will depend upon:

1. how well the distributive education community orients itself to project training;

2. the degree to which project training is accepted as an equally significant method of achieving vocational outcomes for the content of distributive and marketing;

3. how well project training is made operational in terms of enrollees' needs and occupational purposes;

4. how well the satellite components of the program, such as instructional materials, the DECA program of youth activities, relationships with the business community, are structured to reflect adjustments needed to make project training workable.

These four selected conditions can be viewed as the essential pre-requisites for the successful implementation of project training.

IMPACT ON PROGRAM DEVELOPMENT

Having now committed ourselves to the proposition that project training is meritorious and that we are determined to create a favorable climate for its implementation, we will:

1. breathe life into the amendment to the George-Barden Act which gives distributive education its chief impetus for impacting upon the training needs of the total field of distribution;
2. accomodate more youth and adults and thereby make a contribution to the solution of key concerns in our society;
3. confirm our philosophy that there is a theory or a discipline of distribution that rises beyond the scope of on-the-job learnings;
4. find that it is possible to orient students to the unique requirements and characteristics of distributive employment without concurrent employment.

EMPLOYMENT FIELD OF DISTRIBUTION

The Vocational Education Act of 1963 itself provides great latitude for program development in distributive education. Section 10 (d) of the Act further confirms this extended opportunity by removing the restrictive language of the George-Barden Act. Specifically this amendment reads as follows: "any amounts allotted . . . for distributive occupations may be used for vocational education for any person over fourteen years of age who has entered upon or is preparing to enter upon such an occupation, and such education need not be provided in part-time or evening schools."

No longer are we bound by limited, ear-marked financial resources and enrollment restrictions. We can now relate program efforts more closely with the total field of distribution--not just a small part of it. Distributive education can now exert a greater influence in helping people to identify with distribution, and, as a program, become recognized as the chief agent for supplying the manpower resources needed to sustain our free, competitive economy.

When we segment our economy into production and distribution, it is a known fact that more than half the labor force is engaged in work other than the production of goods and services. These workers, in various capacities, set in motion the wheels that give meaning and value to all the goods and services produced in the economy. This is not to say, however, that all of the jobs in this major grouping of the labor force are distributive. A variety of activities are performed including the facilitating function of the office which, in itself, represents a vast employment area.

While we find limitations in labor market breakdowns, we can place some confidence in the assumption that about 30 percent of the labor force is engaged in distributive occupations. This figure is supported by State surveys, interpretations of labor figures, and related descriptive material. The labor force today is 76.5 million. Thirty percent, or nearly 23 million, suggests the scope of the employment field with which we are concerned.

Equally as significant is the projected net increase of 6.2 million young persons under 25 entering the work force during the ten-year period 1960-1970. This will represent a growth 15 times greater than for the previous decade. If we use our rule of thumb of 30 percent in distributive occupations, we find the potential of 1.8 million youth whose needs ought to be met through distributive education. To have achieved this, we would have needed an enrollment of at least 180,000 different individuals for each of the years in the ten year period.

Because distributive education represents a growth area, we should anticipate a larger percentage figure in the 1970-1980 decade. In view of the fact that we are now enrolling more individuals for two and three years in distributive education, we should expect an average annual enrollment figure of 550,000 high school and post secondary students. At best, this is a conservative figure due, in part, to the increasing numbers of high school distributive education students continuing their preparation in post secondary distributive education programs. Project training gives us the necessary flexibility so that we can be more responsive to the total manpower needs in distribution. If distributive education is to be the natural roadway for those entering the field, it would appear that project training could be the vehicle for as many as 60 to 70 percent of the next decade's projected annual enrollment of 550,000. On a non-duplicated annual count, we must recognize that a large portion of project students will become cooperative students in another year.

SERVE MORE YOUTH

Undoubtedly the import of project training relates to the very fundamental fact that through this method more people can be served. A balance between supply and demand is suggested in the foregoing discussion. It is our responsibility to place in the pipeline sufficient numbers who will fortify quality performance in the marketing process. At the same time, an expanded distributive education program will also make a contribution to the alleviation of certain social, economic, and educational problems facing this nation.

In order to respond to the range of needs exhibited among members of our society, distributive education must have more flexibility in operation. The social problems highlighted in our society represent the sum total of a variety of influences impacting upon the lives of individual people. We cannot afford to ignore the common and uncommon needs of people in all environments--urban, rural, or suburban. The mere fact or program availability will credit distributive education its part in reducing racial tensions and juvenile unrest, and in providing skills to a mobile population. Developing the personal capabilities of youth has long been a recognized achievement of distributive education. Expanding its influence in this direction will assist more youth in developing a sense of personal worth, a sense of belonging, and a proper work attitude. In the process more youth will be encouraged to remain in school; more youth will be assisted in making a transition from school to work; more youth will be experienced in setting goals. An expanded program of distributive education will assist in resolving the economic issues of unemployment, poverty, costs of distribution, low productivity, and manpower shortages in distribution.

For many youth attracted to distributive education, cooperative training may not be appropriate or desired. Project training must be available to them as an alternative choice. Larger schools, in particular, should have both cooperative and project classes available at the same grade level. Other situations may draw upon project training as the sole method or used in sequence with cooperative training.

It is expected that project training will expand the number of curriculums in distributive education. Its availability will assure growth of specialized curriculums and cooperation with other vocational services. Project training sets the stage for serving more people in light of their unique needs and interests.

CONTENT

The development of project training in itself does not involve the establishment of new or different content. If the occupational objective for which a curriculum prepares is held by both project and cooperative students then the competencies in their qualifications as distributive workers are the same. The content of distributive curriculums includes subject matter commensurate with the level of performance expected of each student-trainee. Each must be able to express the necessary degree of competency in five areas:

(1) marketing

(2) the technology descriptive of his occupational objective

(3) social skills

(4) the application of mathematics and communications, and

(5) economic understandings

These competency areas reflect the nature of classroom instruction which may be viewed as giving breadth through education. Training, as we have known it through cooperative employment, gives depth. Training without education will not satisfy the needs of individuals who plan careers in distribution. Conversely, education without training will not provide a firm foundation for career development.

Over the years we have determined that "on-the-job training" was not the center of our instructional program; cooperative training represented an extension of the classroom into a laboratory environment. Confidence was expressed for the instruction that was provided in the formal setting of the classroom because it represented an instructional discipline. Salesmanship, sales promotion, buying operations, marketing research, and marketing management became the chief components of the discipline of distribution for which a method of applying this theory in a practical environment was sought. Because of prior legislation, cooperative training became the only method to achieve this purpose. Cooperative experiences, while imperative in achieving program purposes, do not suffice in creating an educated distributive worker. This suggests that distributive training given on a job site can be transferred to another kind of environment for in-depth training purposes. Project training, therefore, is envisioned to bring meaning and value to the content of distribution and marketing.

VOCATIONAL APPLICATION WITHOUT CONCURRENT EMPLOYMENT

Perhaps one of the chief doubts about project training is its ability to produce the same kind of results that are achieved through cooperative training. A list might include: the opportunity to gain job experience, to give meaning to course content, to develop judgment abilities, to interpret consumer needs, to improve personality, to learn how to get along with people, to confirm or reject an occupational choice, to recognize the demands of the adult world, to see the marketing process in action, to participate in marketing techniques. These are some of the values placed on cooperative training. The question facing us today is, "can we have the same expectations for project training?"

Perhaps we can place greater confidence in a positive response if we realize that project participation, as a training technique, ought to parallel cooperative participating experiences. To clarify: a cooperative student has an opportunity to experience a single activity many times which increases his appreciations, understandings, skills, attitudes and knowledges; a project student must have the same opportunity for repetitive responses in relation to a specific project. Too often, we have looked upon a project as a one-time experience. To provide the necessary practice, reinforcement, and transferability of outcomes, any one project could be pursued for as many times as necessary to reach a learning outcome demanded by the level of performance desired. And, as in cooperative training, each isolated experience must be performed within the time limits appropriate to the situation.

While the specifics of project development and the principles relating thereto will be approached in subsequent sessions, I wished to make this one point about project training because it illustrates how we might come to find that it is possible to bring project students to a level of performance comparable to that achieved through cooperative training.

This training in depth supports the concept of a period of time beyond the regular instructional period. It would not be possible to provide practice time of this magnitude within the limits of class time. In creating this kind of environment, program development efforts will be concerned with such matters as facilities and equipment, categorical advisory committees, documented projects, testing and evaluation techniques, provisions for short-term employment, use of student aides and guidance materials.

CONCLUSION

We have, then, within our reach an enormously useful method of instruction. Effectively supported by capable teacher-coordinators, project training will allow distributive education to exert a greater influence in satisfying the manpower requirements in distribution, to be more responsive to the needs of the people, to demonstrate more clearly to our public that the program is founded in theory rather than in method, and to satisfy training requirements without continuing employment.

By extending the capabilities of distributive education in this manner, we make the program available to all wishing to succeed in distributive employment. We make distributive education readily accessible to those students desiring to combine instruction offered in two or more vocational areas. We make distributive education flexible in organization by reducing or extending the amount of time needed to satisfy a level of performance. We make distributive education a useful instrument in our society.

Similarities and Differences in
Project and Cooperative Training*

The goals of project and cooperative training are the same. No matter how instruction is organized, when it is identified as vocational distributive education, there are no differences in the results desired. Students are to be able to meet employment qualifications with the confidence and the competencies necessary to begin marketing and management careers. Employers are to compete to hire the graduates of distributive education classrooms. Teacher-coordinators are to fulfill their commitment by awakening the promise within each student.

Yes, the ends are the same; and they evolve from beliefs basic to the achievement of the objectives of the distributive education program. Whether instruction is organized by cooperative plan or project plan, we believe that:

(1) vocational distributive education must be available when and where it can provide needed services,

(2) care must be exercised to make all learning activities vocationally significant,

(3) subject matter must be selected in relation to the level of the occupational purpose of the curriculum,

(4) enrollment must be open to all students whose potential and vocational purpose are compatible with the program of studies selected.

These are common beliefs which give validity to the goals of distributive education.

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Prepared by Mary V. Marks, Program Specialist, Distributive Education, State Vocational Services Branch, Division of Vocational & Technical Education, U.S. Office of Education, for the 1967 National Seminar in Distributive Teacher Education

Differences within the program lie in the means selected to accomplish end purposes. This may be a matter of organizing instruction in time segments necessary to accomplish objectives. For example, in cooperative training we found that in addition to the control class regular schedules of supervised work averaging 15 hours a week throughout the year justify an allotment of 10 class hours a week per student. In project training we are exploring the validity of a schedule of 5 class hours a week per student for instruction supplemental to that of the regular control class. Both patterns, though different, are means of achieving similar outcomes.

The selection of different methods for enriching learning may also be classified as a means to a common end. For example, project training incorporates a variety of vocational preparation activities, simulated job experiences and supervised on-the-job training. The length of time spent in actual occupational experiences may be decreased from that required of cooperative training students because other learning resources have been added. The means for learning have been adjusted although the outcomes sought remain identical.

Before proceeding to an examination of the topic, "Similarities and Differences in Project and Cooperative Training," the premises for my points of view should be made clear. They are as follows:

1. Full-time Students. The situations referred to apply to training organized for full-time students. These students represent diverse academic and cultural backgrounds but all have work objectives to which distributive education is directly related. Some may be undertaking vocational training in a junior or community college in order to prepare as a specialist for middle management employment in an area of marketing. Others may be enrolled in a secondary school and be preparing either to obtain a career development job upon graduation or to begin their distributive employment in a basic entry or threshhold job in a retailing, wholesaling or service business.

2. Definitions. Preparatory instruction includes cooperative training, project training and pre-requisite distributive training.

   Cooperative Training is a "work experience" program which combines vocational instruction in the classroom with supervised and coordinated on-the-job training related to the distributive occupational field in which the student is preparing for employment.

   Project Training is a "participation experience" program which combines vocational instruction in the classroom with supervised and coordinated laboratory activities related to the distributive occupational field in which the student is preparing for employment.

   Pre-requisite Distributive Training is vocational instruction in a control class which provides learning experiences related to the distributive occupational field in which the student is preparing for employment but is not supplemented by either cooperative or project training.

It is from this background that I shall compare and contrast cooperative and project training. Let me caution, however, that I intend no bias in this paper and such an inference should not be drawn. The seminar focuses on project training. Therefore, my points show this emphasis. They are organized in relation to those individuals most intimately involved with the success of either cooperative or project training: (1) students, (2) teacher-coordinators and (3) employers.

STUDENTS

TRAINING CONTRACTS

Students participating in the supervised and coordinated laboratory activities of project training enter into a series of contracts with their teacher coordinator. Called projects, these agreements provide the structure through which students apply marketing principles and refine their employment qualifications. In cooperative training, an agreement is reached by the teacher-coordinator and an employer on behalf of a student. This agreement sets forth conditions of employment, and it is understood that the student-trainee will be assigned a series of work-training experiences. In this respect there is similarity in the framework established to safeguard the educational purpose of project and cooperative training.

Differences do exist, however, in the organization and operation of contract training patterns. For example, cooperative students take their places as part-time paid employees within the first few weeks that the control class meets and are expected to remain with one employer throughout the training period. The training stations to which they are referred have been selected from those available, able and willing to cooperate with the schools. The contract specifying the arrangement is informal but made in good faith. It is subject to changes which may affect favorably or adversely the nature of planned work-training experiences; and it may be cancelled or interrupted depending upon the strength of local business or inflexible policies regarding personnel budgets. Thus continuity of training on the job may be broken through no fault of the student. It may even become necessary for the teacher-coordinator to locate another training station where a student's earlier work experiences may or may not be accepted as part of his new training sequence.

Project students are a strong partner in contracts developed for their training. Enrollment in the project control class signifies acceptance of a contract procedure which will include a sequence of separately developed agreements, each in force for a specified length of time. Continuity of this training arrangement is protected since the parties involved are teacher-coordinator and student. The need to operate a profitable business enterprise is not a conditional feature. It is understood that paid directed work experiences will be part of one or more projects, and that there is no set time within which these must begin. Periods of work may be seasonal, a few hours a week or of relatively short duration; thus on-the-job training becomes available with more than one employer, and students may work in situations where they find different policies and procedures in operation.

NATURE OF LEARNING EXPERIENCES

Both cooperative and project training provide investigative experiences which encourage student-trainees to exercise judicious initiative and move towards independence. Emphasis is on understanding what is being done and how to do it better as well as on immediate skill development. In effect we might say that these students are enrolled in clinical education.

Cooperative trainees are caught up in the voices and actions of people at work and continuously feel the impact of customer and worker relationships, product characteristics and handling, and operational decisions reached just minutes ago. Their senses respond to this laboratory for learning as they are thrust into exciting new experiences or retained in activities they now regard as routine. This affects their rate of progress and satisfaction in cooperative employment. These students have the dual responsibility of being productive as employees and as students. With their training sponsor's help they make and grasp opportunities for self-analysis and the examination of marketing theory in action. The degree of relevance, however, of current employment experiences to activities of the cooperative control class is a matter of job performance first and on-the-job training second.

While project students also have "learn by doing" experiences, each such project has a more compact structure. The student is aware of the specific purposes of the work experience and what is expected of him in relation to his distributive program of studies. The experience is timed to fit his readiness to succeed and is appropriate to concepts being developed in the project control class. This tends to give equal emphasis to the student's role as a productive employee and as a project trainee. These students also have learning experiences which simulate actual job problems or strengthen personal deficiencies. They have the opportunity to develop at their own rate of motivation and capability. Under the supervision of their teacher-coordinators they may explore aspects of their career fields which provide a maturity of job preparation beyond that generally associated with the level of performance of others in their age group. Project students are not limited to the training activities or the routine duties assigned cooperative students. This is good if projects strengthen the foundations upon which a career is to be built and underscore the process of career development in the occupational area of a student's interest. There are however the ever-present dangers of (1) over-training in relation to acceptance by future employers (2) encouraging unrealistic expectations and self-concepts at any stage of employability and (3) creating a halo effect as regards actual employment conditions and practices in marketing.

COMPETITION

In projects and in cooperative training, experiences are planned for students that help them develop the ability to compete fairly and to make decisions, however minor, that enhance the competitive position of a company, an individual or a product. Both groups of students also participate in the contest program of their division of the Distributive Education Clubs of America; and where students are sectioned according to both patterns of training, their natural competitiveness may be channeled into a worthwhile learning activity.

Cooperative students identify easily with the goals of their employers and share in the stimulation of competition provided by such devices as sales or unit quotas, in-house contest and award programs and the push to beat last year's figures. They feel the pressure for profits and for cost reduction. As regular part-time employees they are members of an adult team and can measure their successes against those of other worker-associates.

The situation is somewhat different for project students. Short periods of employment generally do not arouse a high degree of loyalty or competitive awareness within a business organization. These students are less likely to be assigned to jobs that appear on the regular payroll and consequently there is little opportunity for them to experience the interacting forces present in competitive enterprise. Project students more often will compete one against the other. In their school or community-wide laboratory they will learn about competition by means of simulation projects such as business games or directed observation. They will also feel pressures mount as projects thrust them into competition with their own competencies in such terms as amount of time needed to plan and complete a creative project or the degree of their improvement in making an accurate interpretation of economic data in relation to consumer demand.

TEACHER-COORDINATORS

Similarities and differences in cooperative and project training are as evident in the tasks performed by teacher-coordinators as in the participation activities required of distributive education students. This may be demonstrated by a review of responsibilities in coordination, instructional materials, evaluation and program acceptance.

COORDINATION

The job title, teacher-coordinator, is applicable equally to those who conduct cooperative or project training. Simply stated, the goal of coordination is to maintain a dynamic interchange between requirements of employment and the content and learning experiences incorporated in preparatory vocational instruction. The mechanics of providing coordination may differ but the concept of coordination as a responsibility remains constant in each type of training. The roster of distributive education personnel, therefore, includes cooperative teacher-coordinators and project teacher-coordinators.

A further similarity lies in the requirement that time be made available for coordination. This implies that the school assigns regularly scheduled periods for such activities as employer visitations, surveys of marketing practices and counseling with students and training sponsors. In cooperative training 10 to 15 hours a week as coordination time has been the general practice since teacher-coordinators have to travel from the school and between training stations in order to provide the supervisory and instructional services needed by their students. In project training we lack the experience to support a recommendation, but it seems reasonable to assume that the equivalent of five to ten hours a week for coordination is needed; this in addition to the time scheduled as the student's project laboratory period. Arranging periodic short-term employment projects, directed observations and individual marketing studies as well as assuming duties similar to those of cooperative teacher-coordinators is a continuing responsibility of the project teacher-coordinator.

The obvious difference between cooperative and project training coordination is that the former provides a training partner for the teacher-coordinator. There is an employer-designated contact person who assists in developing learning experiences for student-trainees. The project teacher-coordinator is the programmer of learning experiences for his student-trainees. Although he may have the good fortune of being able to team with a cooperative teacher-coordinator or employer consultants he none-the less serves as training sponsor and teacher-coordinator.

INSTRUCTIONAL MATERIALS

It is in the area of developing, selecting and using instructional materials that major differences appear in the duties of teacher-coordinators. While it is expected that each will have background in learning theory on which to build instruction for control classes in cooperative, project and prerequisite distributive training, teacher-coordinators of project laboratory learning activities will need considerable strength in the application of learning theory.

It seems to me that the development of educationally sound projects requires special expertise in (1) appraising student readiness, (2) identifying competencies to be developed, (3) determining behavioral outcomes desired, (4) describing the various aspects of essential learnings, and (5) specifying evidences for levels of achievement expected. This is not to suggest that teacher-coordinators have to create new projects for each student, although this may be the case when resource materials are scarce. Standardized projects, however, always will need to be adjusted to fit the instructional situation and subject matter being emphasized, and to serve the career objective and individual aptitude of the student involved.

To a greater degree than in cooperative training, the project teacher-coordinator also needs to know about printed materials, media and marketing equipment; their capabilities and how to use them effectively. Maintaining vocational emphases by stimulating, enriching or reinforcing competencies required in employment needs special attention in project training. The teacher-coordinator cannot make use of the day-to-day work experiences of his students. He himself must provide the sequence of activities that will make each student's projects vocationally purposeful. Of key importance then is his ability to select relevant materials to be included in projects, to handle sample merchandise, forms and other props used in simulation and to locate and utilize the variety of learning resources available in the school and in the business community.

EVALUATION

Distributive education teacher-coordinators build experiential files for both cooperative and project students and use them (1) to analyze progress during the training period and (2) to substantiate recommendations to employers. In each case evaluation instruments are used to record ratings given by the individuals supervising or directing the experiences being measured. These devices protect the integrity of the program and help the student recognize the value currently placed upon his qualifications for full-time employment.

It is immediately apparent that progress reports used with project students will differ from those used with cooperative students. It is customary for employers, for example, to be concerned about social characteristics and the sales or unit volume produced by their workers. This type of gross rating is therefore used by cooperative teacher coordinators who then must translate the information gathered into language more compatible with training objectives.

In project training the structure of each project includes the basis for evaluation. Behavioral outcomes are stated as distinct parts of broad competency areas, and the student is assisted to recognize when his activities are pertinent to the desired performance. The teacher coordinator rates each project and makes this a part of the project student's training record. The opportunity to involve employers in project evaluations is limited. Teacher-coordinators, therefore, must strive constantly to provide ratings that are meaningful in the market place.

PROGRAM ACCEPTANCE

Distributive education, as is all of education, is in a period of self-testing and adaptation as it seeks to respond to the emerging economic and social value system being identified with manpower training and development. During the past 29 years distributive cooperative training has gained the confidence of educators and employers because teacher-coordinators have successfully blended coordination, instructional materials and evaluation. This has yet to be adequately demonstrated in distributive project training.

Probably the most important task facing teacher-coordinators is to gain understanding and support for this new pattern for distributive training. This is a common obligation; although demonstration belongs primarily to the project teacher coordinator. Project training and cooperative training differ in two broad aspects, plan of organization and method of instruction. These need interpretation to school administrators, parents, counsellors, and students, and in a different way to employers. Benefits and limitations need to be pointed out so that the capabilities of each type of training are closely allied to expectations. The goals of distributive education have not changed and their achievement should be the basis for program acceptance, whether by cooperative or project training.

EMPLOYERS

The third group of individuals prominent in all distributive education programs consists of managers, supervisors and employees engaged in some type of marketing activity. Just as similarities and differences exist in the role of teacher coordinators and students in cooperative and project training so are they evident in the role of the employer group.

AGREEMENTS

Cooperative training casts employers in the role of "full partners" with the school. They agree to provide the laboratory setting for on-the-job training of one or more students and understand that this arrangement is part of a school-centered program preparing these youth for an area of employment of which their business is a part. They adjust their personnel allocations to include regular part-time employees and identify duty stations which need less than full-time coverage throughout the life of the cooperative training agreement. They employ, train, and supervise cooperative students, and compare their progress with that of other employees. Frequently they develop a proprietary interest in their trainees since cooperative training encourages greater insight about individual potential.

Employers who work with schools offering distributive project training are "partners" in a more limited sense. Their commitment is less formal and ranges from consultant services and student sponsorship to the supervision of student-observers and the periodic employment of on-the-job trainees. With this type of flexibility possible employers are able to participate freely and identify within their companies a wide variety of worthwhile learning experiences for project trainees. This also permits them to fill some short-term employment needs while contributing to the school program; but it probably does not create a strong bond between an employer and a student.

EXTENT OF PARTICIPATION

One of the major differences between cooperative and project training is the extent to which the entire marketing community is able to participate. Cooperative training generally excludes the owners of very small businesses, some of the best training stations, because their volume does not justify the addition of a regular part-time employee. In rural communities there may not be an adequate number of training stations available for students wishing to enroll and consequently no cooperative training program may be possible. Conversely in urban centers there may be too few cooperative trainees to permit all employers wishing to participate to do so. It should be added also that employer selectivity of trainees denies admission into cooperative distributive education to many students who have latent employability.

Employers today are being asked to make a social as well as economic investment in youth and are seeking ways to respond. It is in the vested interest of distributive education students that all employers have the opportunity to make their needs felt, to get acquainted with themselves through the eyes of young men and women who will soon be in the labor force, to become involved in the education of the future leaders for marketing and distribution. Project training makes it possible for students of a wide range of ability and interest to be in the pool of trainees referred for part-time employment. It permits employers to cooperate with the schools at frequent intervals during the school year and opens the way for small or seasonal businesses to participate along with the larger employers of the area.

Procedures for project training need to be made clear especially to employers who have known distributive education only as cooperative training. Their continuing support will be justified when they understand that: (1) project training is not a substitute, but rather an additional way the schools have for preparing students for threshhold, career development or specialist jobs, as the case may be, (2) there are advantages in training both cooperative and project students within the same organization and (3) no distributive education trainee will be certified to an employer unless he is able to perform at the competency level prescribed for his program of studies.

SUMMARY

In this paper I have attempted to provide some background on similarities and differences in cooperative and project training. They have been presented in relation to requirements for students, teacher-coordinators and employers.

We have seen that the new dimensions for the distributive education program have left its objectives unchanged. The means have been broadened however so that the new pathways as well as old may be followed.

From this point on the task is to identify the elements of a model project and to develop projects appropriate to the needs of students and the levels of their job objectives. Distributive education is ready to incorporate into its program this new pattern of vocational preparatory instruction. All of us look to members of this seminar for materials and leadership in this endeavor.

SECTION II

THE NATURE OF THE PROJECT PLAN OF INSTRUCTION

Project Method in Education*

In this conference, you have come together to consider adoption of the "project method" in Distributive Education. And, purportedly because of the discussion of this method in Bayles-Hood's Growth of American Educational Thought and Practice, I have been asked to deal with the theory that underlies it. Hence, points of similarity if not of identity between what will be said here and what is written there will not be coincidental; they will be intentional.

For us who lived through the period, the expression "Project method" immediately brings to mind the name, William Heard Kilpatrick. Kilpatrick was indeed the one who brought the term into eminence in education. However, its earlier use--in vocational-agriculture education--is the one that is applicable for Distributive Education, and is therefore the one upon which we shall focus attention here. We shall come to Kilpatrick's deviation, but first let us look at the earlier phase, and to do so we can profitably give attention to bulletins published during the teens by the U.S. Department of Agriculture and the U.S. Bureau of Education, typified by one written by Franklin Ernest Heald, specialist in vocational-agriculture education for the Department of Agriculture.[1] In this publication, Dr. Heald set forth the idea as it was to be, and was, used by vocational-agriculture teachers in the high schools of the United States, under the auspices of the Smith-Hughes Act.

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* Prepared by Dr. Ernest E. Bayles, Professor of Education, University of Kansas, for the 1967 National Seminar in Distributive Teacher Education

[1] Publications of the Federal Board for Vocational Education. Bulletin No. 21. (Agricultural Series No. 3.) "The Home Project as a Phase of Vocational Agricultural Education." September, 1918.

A major point brought out by Heald, which I have long found to be highly enlightening, was his distinction between "project" and "practicum." According to Heald, the term project "carries with it the idea of a program of importance, of some duration, and an expectation of certain tangible and valuable results,"[2] then adds that it "should not be confounded with practicums . . . ." As an example, he says, "If a school leases an orchard, prunes, scrapes, tills, and does all the work needed for a year . . . . , this is a class project." Then he says, "The pruning is a practicum rather than a project . . ."

Thus, you see, in its original intent a project is to be not only comprehensive, both in topics to be covered and in time to be spent, but is also to be important or significant educationally. It is educational significance that seemingly constitutes the crucial difference between a project and a practicum, and thereby makes the former educationally valuable. Moreover, this distinction may have been a frequently overlooked factor in certain life-adjustment programs that received considerable attention in the schools some time back. Pruning or spraying an orchard is a time-consuming operation that repeatedly has to be done, but does not require much agricultural know-how on the part of the operator. It does not emcompass and necessitate the study of a sufficient array of agronomical principles, nor reasonably require any study of sufficient depth, to serve the purposes of vocational-agriculture education. Hence, a distinguishing term--practicum--is needed. And when, as in many "life-adjustment" programs, a student spends half (more or less) of his time working on an industrial or commercial job, the chances are large that he will be spending his time on practicums, not on projects, and the educational value will be correspondingly low.

Let me read you a half-page quotation from Heald's pamphlet, which he introduces by saying that "Time enough should be allowed to accomplish the following:"

1. To cover the entire natural cycle. Examples: For corn this would include at least from seed testing in early spring to seed corn selection and marketing the crops in the fall. It is best to begin with the selection of seed corn in the field in September and follow with fall plowing if possible. For poultry, one would start with a laying flock in the fall and finish in the early summer or would start with the incubation of eggs and close with the marketing of the grown birds or the selection of a winter flock. A garden project would close only when all crops were sold, stored, or canned. A dairy-cow project would require several months to obtain reliable records of production and to determine the improvement due to selected rations.

2. To acquire skill in all processes involved in the project.

3. To obtain a measurable profit or loss or improvement. Examples: The crop of potatoes must be harvested and either sold or a price assigned to give the greatest value to the project. Poultry feeding and egg records have no

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[2] Ibid., p. 7.

> real educational value until some measurable results are evident, usually after several months.
>
> 4. To learn the lessons involved both from study and from experience.
>
> 5. To involve some general management problems rather than isolated technic.[3]
>
> Later on it is suggested that:
>
> . . . . School and home practicums which might be related to the project study and project work in corn production and might become necessary parts of the instruction requiring additional emphasis would include among others--
>   Testing seed corn
>   Home mixing of fertilizers
>   Terracing to control soil erosion
>   Laying out a drainage plan for the field
>   Practice in tile drainage on the field to be used for corn
>
> Such practicums and related instruction should not be considered separate projects, although a draining project might be planned independently. The instruction related to the project would include many minor exercises such as the calibration of a corn planter or the construction and use of corn-drying racks.[4]

To be a project, then, a curricular unit must be both comprehensive and educationally significant. It should be such as reasonable to comprehend or include a variety of useable principles and provide both incentive and opportunity for them to be well learned. Moreover, it is to be noted that they will be learned in their "natural settings"--in the contexts wherein they will henceforth be used. What is learned is that which contributes to the end to be achieved, the "tangible and valuable result" that the enterprise is designed to accomplish. Although the teacher's major concern may be for the learnings to be achieved, the focal concern (the end-in-view) for the student is the product that he is seeking to bring into being. What he learns is a means--an instrument--to help him reach his goal; the learnings, therefore, are "instrumental." This is the principle of "instrumental learning" a principle that seemingly lies at the very heart of the project method.

It is because what a student is called upon to learn is seen by him as promotive of the end that he himself desires, that he learns so much and so well. As long as what will satisfy teacher is a student's criterion for determining how much and how well he will learn, he keeps his eye on teacher and, when teacher seems satisfied, student quits and turns to something else. But, when his own goal or objective is at stake, then he himself has to be satisfied and that puts the whole matter in a different light. When a youngster is preparing to pilot his football team to victory, his heart is in it and, when he sees that there is something he does not yet have "under his belt," he will stay with the matter even though his coach may perchance be satisfied. He keeps his eye on whether he has learned what is needful, rather than on what teacher thinks about it. This is the theory underlying "instrumental learning," and the rationale for belief in the efficacy of "project method."

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[3] Ibid., p. 12.

[4] Ibid., p. 16.

From the foregoing, it is evident that the project method is a form of "activity-school" program. It posits active, self-propulsive learners; not passive recipients of what is to be poured into "storage-tank"minds, afterwards to be spewed forth when the spigot is turned. But the success of any such program is not to be judged on the basis of how busy the students have been, or how many hours have been employed, or even how impressive are the products that have been fashioned. The educational criterion, what the teacher is to look for, is how much of desirable learning has been achieved. Mere busy-work is to be decried whether instigated by student or by teacher. Hence, what projects are to be included in a curriculum is a matter for serious and discerning study; not something to be dictated by passing whim or fancy, whether the whimsicality be that of student or of teacher. The now-children-what-shall-we-do-today question is not to be the foundation upon which choice of subject matter shall rest.

For vocational-agriculture education, there could be considerable student-choice among a variety of teacher-approved projects, because the overarching educational purpose was understood and agreed upon by all--students, school, and community. Competent future farmers, knowledgeable in the best-known ways of the vocation, were the end-in-view. And the same presumably holds true of Distributive Education, though I see it as your job, not mine, to spell-out the program. Hence, a master list of approved projects may be used as the basis for individual student-choices. But, for a given class as a whole, it is expected that the total list shall be fully and equitably represented--that reports on individual projects shall periodically be made to the class and the individual learnings be made common property, available to and required of all. Thus, although instrumental learning is the immediate basis and incentive for each individual student, the overall objective of the educational program as represented by the teacher is to be expressed in terms of a master-list of learnings to be expected of all. In this way and in this sense, learnings become ends-in-themselves, not instruments to promote other ends.

At this point, I must hasten to step out of the role of a discussant of project method, and speak as a representative of democratic educational theory. To me, project method is one--but only one--way of promoting a democratic educational program. But it can be equally-well used to promote a highly dictatorial educational program. To state educational objectives in terms of competencies to be achieved (in other words, of knowledges, skills, and attitudes to be attained) tends to be more dictatorial than democratic. A democratic educational program should seemingly delineate curricula in terms of issues to be studied, rather than of competencies to be established. This I cannot take the time to discuss here. I deal with it at length elsewhere,[5] so mention it here only to make a passing attempt at defending my professional integrity. To avoid dictation by a teacher, a class must study issues and arrive at conclusions which the study appears to require, regardless of whether the teacher's previously conceived convictions are supported or denied. But this is a disgression, for the record; one that does not _necessarily_ negate the point that a master-list of desired teachings may be used as a guide for indicating what has been accomplished and what needs yet to be done.

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[5] See, for example, Bayles, Ernest E., Democratic Educational Theory. New York: Harper-Row, 1960. pp.

Returning now to our major topic, we might take advantage of the foregoing digression to note that project method is a teaching device, not a philosophy, and can serve in an autocratic program as well as a democratic one. In fact, coming to eminence in _general_ education under the aegis of Kilpatrick, it was employed in such a way as to promote more of a _permissivist_ program than either a democratic or an autocratic one. And, since one would doubtless be deemed remiss if he were to discuss the project method without reference to Kilpatrick, this seems to be a propitious time to do it.

So far, we have confined our attention to vocational-agriculture education. But Kilpatrick's pamphlet of 1918 broadened the field for educational projects to elementary education in general. And this changed the picture fundamentally, for it raised the whole question of who or what is to determine curriculum content. Whereas, as we have noted, in agricultural education there is essential agreement as to educational purpose, in general education on either elementary or secondary level there is widespread and vital disagreement. Shall we seek a return to the good old days (as satirized by Benjamin in the Saber-Tooth Curriculum),[6] shall we bring the curriculum up to date--almost, as least--but still follow in the wake of social trends, or shall we strike out boldly and use the schools to take a leading role in helping to "build a new social order"? This is but one of many issues that are raised when one gets into the problem of objectives for _general_ education.

Kilpatrick's major pronouncement during the heyday of project method was Foundations of Method.[7] Due to Kilpatrick's leadership in Progressive Education (note the capital letters), this volume was taken as essentially a manifesto of the movement, even though the author nowhere made any such claim.

Therein Kilpatrick made much of his formula, "pupil purposing, pupil planning, pupil executing, pupil judging." These were his rendition of the purposive act--a four-step affair--and the _formula itself_ put all four steps in pupil hands. That Kilpatrick was far from adamant on going this far, I document elsewhere;[8] for now, we need merely to note that this formula puts everything in pupil hands. It is educational permissivism unalloyed. It fully justifies the teacher who, when asked by a visiting mother what they were going to study that day, supposedly replied, "I don't know. The pupils aren't here yet." During the twenties, much was made of this Progressivist predicament by gag writers and magazine cartoonists, and it was continually subjected to questioning by educators. But, as we have already pointed out, agricultural education was not plagued by this dilemma, nor does Distributive Education need to be. We can be forewarned, however, of the necessity of seeing clearly that the question of educational objectives is not settled by adoption of project method.

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[6] Peddiwell, J. Abner. _The Saber-Tooth Curriculum_. (Foreword by Harold Benjamin.) New York: The McGraw-Hill Book Company, 1939.

[7] Kilpatrick, William Heard. _Foundations of Method_. New York: The Macmillan Company, 1926.

[8] Ibid.

There is another facet of Kilpatrick's promotion of project method that may well be brought out. In Foundations of Method, he proposed four different types of projects and approved of all four: 1. producer; 2. consumer; 3. problem; 4. drill. Since Type I, Producer Projects, has already been fully discussed, we need not describe it further. Suffice it to say that it was that of vocational-agriculture education and might be called Kilpatrick's own, in the sense that on it he based most of his argument in terms of avoidance of teacher domination and promotion of instrumental learning. Type III, Problem Projects, differed from Type I only inasfar as not requiring a tangible product as outcome -- the harvest from a 5-acre corn, wheat, or soy bean plot; an exhibition of the paintings of an art class; production of Midsummer Night's Dream or Romeo and Juliet, a parents'-day showing of the actual unit-cost differences among various brands of potato chips, baking soda, or what you will. A problem project deals with an intellectual problem issue, or difficulty, seeking a tenable solution. It is Dewey's Complete Act of Thought carried out--"reflective teaching." Dewey, however, never came even close to saying or implying that pupils alone should do the purposing, planning, etc. His was no crusade for educational laissez faire. He insisted on student challenge and involvement and instrumental learning was vital to his program, but Dewey's writings carried no implication whatever of "negative education."

It is what Kilpatrick classified as Type II, Consumer Projects, that introduces a distinct reversal of theory from that which we have hitherto been discussing. After setting forth the proposition that a given project should foster or require only those learnings that would be instrumental in carrying it to completion, consumer projects inject a strange deviation. When the members of a second-grade class pay a visit to a grocery store, a dairy, or a United States post office, they are "consuming" in the sense of profiting from what others have done; they are not themselves the producers. An able teacher, preparing the class for taking such a trip, will have a planning session so that the class will know what to look for; what to find out. But what shall be the basis for deciding what this shall be? What criteria shall govern the choice? For a producer or problem project (Type I or III), the criteria are obvious: What must be learned in order to achieve the desired production or to solve the problem? But a wide variety of observations might be made in visiting the city water-supply system or in studying Massachusetts-Bay community life, many of which the teacher will not deem pertinent to the occasion. (You know what the cat saw when she went to visit the queen!) What shall be chosen does not inhere in the project itself, but is extraneous thereto; hence, it is not instrumental. What the class will see (consume) is presumably what it goes to see, and an able teacher is not going to tolerate any nonsense. Thus, a consumer project can hardly be imagined as getting far from being predominantly teacher-planned! Pupils do what is necessary to satisfy teacher, and the whole network of theory based on pupil-design falls apart.

This I think you must continually hold in mind as you deliberate on adoption of project method and make your plans. For you, however, it will not pose the dilemma that it did for general education. As we noted before, in Distributive Education you have a fairly clear, agreed-upon objective or set of objectives, so do not have to place any theoretical dependence on pupil purposing as the determiner of what learnings shall accrue from a given project. I can therefore send you to William Heard Kilpatrick, to John Dewey, and to Charles A. McMurry (the latter, during the late teens and early twenties, being the chief exponent of consumer projects) for guidance in working out your plans for introducing project method into Distributive Education. But you may do well to remember that, when the principle of instrumental learning is ignored, both extent and depth of what is learned are likely to be curtailed.

Not to leave more loose ends dangling than I can help, I might remark that Kilpatrick's Type IV, Drill Projects seem to differ little from traditional, drill-recitation procedure. He recommends them only as adjuncts to other projects, such as when a class needs to know certain arithmetical combinations in order to carry on a grocerystore project, they take time out to drill on those combinations. But this seems to stretch the project-idea almost beyond the elastic limit. In fact, it has more than once been suggested that the very catholicity of the four types makes a project of about everything likely to be done in class, and when a term is expanded to include everything it in reality ceases to mean anything. Possibly, that is why it was not many years after publication of Foundations of Method that the term "project" declined in popularity among American educators and has long since almost disappeared from their vocabulary. The word "unit" now seems to have largely replaced it.

But I see no reason that Distributive Education could not make good use of the project idea, if only it is clearly understood and kept in mind that project method is indeed a method. It is not a philosophy or a program, for it seemingly suffers when stretched to include ends as well as ways and means. That, I think, is what contributed to the Progressive dilemma of seeming to tell us that pupil purposes should rule, yet all of us (including the Progressives) know that we as teachers are obligated to see that things do not get out of hand. The point in theory seems to be that teachers have to have a basic, overall educational purpose; one that is clearly formulated, consistently followed, and can be explained and defended when needful. Then, and only then, can any method be judged as applicable or not applicable in particular cases and, if applicable, put to work with successful results. Project method is a method; not a philosophy.

Projects and Project Structure*

The complexity of modern distributive teaching does not show signs of an easy or early solution. The rapid increases in enrollments, the expanding nature of service and programs needed by the marketing segment of industry, and the changes within the discipline of marketing and distribution promises nothing but increased demand on the talents and ingenuity of distributive teachers and teacher educators. The most pressing of these demands is apt to be that of meeting the day-to-day instructional challenges. As important as the administrative operation of the program might be, the classroom is still the center of effective distributive education. Educational complexity has been compounded in the distributive education field by the injection of a new and somewhat different form of teaching-learning construct generally called "project training."

Project training came into focus as the result of changes via Item D, Section 10, Public Law 88-210. The concept of activities and projects associated with classroom and cooperative instruction is not new to distributive education. It has been followed as standard practice for many areas of study. The difficulty posed by this new presentation of "project" was found by most distributive educators to be a semantic one. What was meant by "project" under this new teaching-learning construct? How are these "projects" carried out? What are the characteristics of a "project?' These and many other questions have been asked, and the answers provided are not, to some, entirely complete or satisfying.

This paper will attempt to come to grips with three aspects of the project teaching-learning situation. First, a review of frequently used definitions and concepts of projects and project training. Secondly, relevant comments from research on and about learning theory. Thirdly, a description of the essential elements needed in a project to meet sound educational requirements.

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Definitions and Concepts of Projects

It is not the intention of this section to pursue the ultimate or arrive at a definitive statement relative to projects or project training. It is hoped that by quoting several of the more common descriptions and definitions of projects that an apperceptive base will be established that will adequately support the discussion of essential elements in projects that are to follow.

The recent USOE publication, DISTRIBUTIVE EDUCATION IN THE HIGH SCHOOL, by Kay B. Brown, provides a glossary which includes the following definition of a project. "Any individually designed learning activity that has a behavioral objective related to an individual's distributive occupational goal and is to be accomplished in a specified length of time; an independent activity completed in a laboratory environment." (Brown-1966, p.93)

Haines and Ferguson suggest "the project method integrates classroom instruction with a series of learning activities or projects designed to fit a student's occupational objective." (Haines-1966, p. 34) The laboratory concept is indicated by Marks. "Unlike the cooperative situation where the student is employed and his training supervised by a department head or manager, the project laboratory relies upon the teacher-coordinator to plan and supervise participation experiences." (Marks-1965)

Early definitions of "project" contain the essence of current usage. Stevenson suggests that "a project is a problematic act carried to completion in its natural setting." (Stevenson-1921, p. 43) Risk used the unit of learning activity concept and describes the characteristics of the project as:

(1) The undertaking is complete in itself.

(2) The learning activity is aimed at a definite, attainable goal.

(3) The learning activity is purposeful, natural, and life-like in procedure to attain the goal.

(4) The learner plans and directs his own learning activities.

(5) The goals or ends of achievement are definitely and objectively measurable. (Risk-1941, p. 471)

The Dictionary of Education contains the following statement on projects. "Project: A significant, practical unit of activity having educational value and aimed at one or more definite goals of understanding; involves investigation and solution of problems and frequently, the use and manipulation of physical materials; planned and carried to completion by the pupils and teacher in a natural, "real-life" manner." (Good-1959, p. 421)

Another concept, which gives recognition to the fact that projects may be used in both cooperative and non-cooperative plans, is one which has been encouraged by this writer. "Participating experiences are carefully organized activities and projects designed to provide students realistic vocational application of the content learned in the distributive courses. Inherent in the definition is the planned arrangement of a sequence of activities and/or projects and that these activities and projects have specific value in occupational preparation." (Samson-1966, p. 25)

It seems fairly clear that project training does not imply a new or different distributive curriculum. The project plan provides an alternative to cooperative part-time education as a means of having the student experience vocational application of his classroom learnings.

It is my suggestion that perhaps the term project was adapted too quickly and another term such as "laboratory" or "occupational laboratory" should have been used to designate the alternative pattern to cooperative education. Thus the distributive program at the high school level might be structured as shown below. With project training occurring at any grade level with the prime emphasis given, however, in the occupational laboratory during the senior.

10th Grade	11th Grade	12th Grade
Classroom Preparatory	Classroom Preparatory	Classroom plus Cooperative Education
		Classroom plus Occupational laboratory

Regardless of the name applied the intent is obvious--there is to be learning activity designed to provide for the distributive student a meaningful real life situation that will permit appropriate vocational application of classroom learnings.

Comments from Research and Learning Theory

It is the purpose of this section to draw from past and current literature statements relative to learning theory. The appraisal and development of a learning process such as the project needs to be measured against what has been found to be sound and reasonable for learning in general. The consistency of our approach to project learning with accepted learning theory should give some assurance that our efforts will be profitably received in practice.

Determination of Goal. "A person learns best when he has his own purposeful goals to motivate and guide his learning activity. For genuine learning to occur, the pupil himself must see the reason for studying and recognize the value the data have for his goals." (Cantor-1953, p. 287) To the individual who cannot see a relationship between a learning activity and a personal goal, be it ever so tenuous, the burden of learning and performing that activity can be extremely heavy. As a check point in planning learning activity for students the teacher might ask, "Is there a reasonable clear relationship between what is proposed as an activity and the goal of the students?" A negative or weak answer to this should cause the teacher to question the advisability of using the activity.

The Role of the Teacher. Teaching embraces many kinds of process, behavior, and activity. Gage suggests that teaching can be analyzed through at least four categories; (a) types of teacher activities, (b) types of educational objectives, (c) components of the learning process, and (d) families of learning theory. (Gage-1964) If we use any one of these as a base for building an approach to project learning, then one additional concept needs to be considered. ". . . teaching is (usually) treated as a dependent variable to be explained in terms of the teacher's motivation and the information he receives. Gage points out that a more useful approach,from the standpoint of education, would be to treat teaching as an independent variable, student learning being explained in terms of what the teacher does." (Scandura-1966, p. 140) The development of projects and their application to a variety of students is expected to be teacher directed. Thus, perhaps more than in other aspects of distributive teaching,the project activity will indeed put the teacher in a more crucial position, and the student learning will be more directly dependent upon the teacher's role.

Individual Differences. "Another relevant point is that what the student learns depends not only on what the teacher says or does, but what the student already knows and can do. Individual differences in knowledge and ability may result in completely different kinds of learning even when identical information is given." (Scandura-1966, p. 140) Student variability is not questioned, but the evaluation of project outcomes may have to be an individualized matter and processes developed that will permit that this be done effectively.

Sequence of Activities. "Instruction consists of leading the learner through a sequence of statements and restatements of a problem or body of knowledge that increases the learner's ability to grasp, transform, and transfer what he is learning. In short, the sequence in which the learner encounters materials within a domain of knowledge affects the difficulty he will have in achieving mastery." (Bruner-1964, p. 313)

It must be anticipated that projects will be of differing difficulty and within projects the schedule or steps of learning need to be carefully planned to assure minimum learning difficulty.

Corrective Information. "Knowledge of results is useful or not depending upon (a) when and where the learner is able to put the corrective information to work, (b) under what conditions such corrective information can be used, even assuming appropriateness of time and place of receipt, and (c) the form in which the corrective information is received." (Bruner-1964, p. 315) It has been an accepted procedure in vocational education that the student be continuously informed of how he is progressing and the relative strengths and weaknesses of his performance. There must be within the process of project training regular reviews of progress.

This cursory review of these five aspects of learning should suggest the need for considerable investigation and research regarding the use of project training. Because of the structure and control that is possible on project learning by the distributive teacher, meaningful research should be possible. Every teacher educator should set as his personal goal one piece of respectable research completed on this phase of distributive teaching within the next five years.

Essential Elements of a Project

Projects may be, through design or usage, total class efforts, small group activity, or an individual task. The elements described here would seem to be essential to any project regardless of the number of persons who will carry it out. Some aspects of the project may become more complex with group or total class involvement thus necessitating more detail and time from the teacher. The seven essential elements are described and a summary sheet is attached.

Descriptive Title. The name given to a project should provide some insight into what it is all about and also provide some stimulation to the student. The cold sterile caption, "Selling - Project 19", will go over with students and with most teachers like week old fish. The project may be coded to facilitate filing and retrieval but the title, like an advertising headline, should tell a good story.

Objective or Purpose. The teacher may have different objectives in mind even when using the same project with two different students. Because of this, specific objectives of a project may not appear on the project document itself. The establishment of objectives would come through a teacher-student conference on needs and interest of the student. This step must be done carefully for all that follows depends on the wisdom of the decision made in this planning conference. When the teacher and student have agreed on what the purpose of the project activity is going to be, it should be recorded by both the student and the teacher--perhaps on a project planning record rather than on the project document. The rationale, which should be on the project, and the project activity, should be written in sufficient detail so that certain purposes and possible outcomes are apparent by just reading the project document.

Nature and Scope. Every project should have a preliminary statement that "sets the stage" or gives a rationale for the activity that is to follow. This preliminary statement should provide sufficient detail so that the nature of the activity can be determined (in school or out of school), so that the nature of learning can be determined (cognitive, affective, or psychomotor) and so that the level of the main activity is known (facts, processes, etc.). It may be that the code mentioned earlier will contain this information, but even so the project document should contain an introductory statement that would be meaningful to any person who might have reason to read or use it.

Materials, Equipment, and Resources. This element could be provided to the point of useless boredom. It is my feeling that those things normally expected in a reasonably well equipped high school distributive education laboratory need not be listed time after time. This element should contain those rather special or unique items which may not be present or available for the student. For example, microscope, closed circuit television, miniature model store, or a community resource such as Better Business Bureau. Any items which may be needed in more than what would be the usual supply should be listed. Resources which may be available but would take considerable lead time should be mentioned.

Pre-Project Preparation. In an on-going program using the project training each student will be continuously working through a sequence of activities which are periodically reviewed and adjusted according to need. Because of this, one may think that pre-project preparation would be accomplished by successful completion of a previous project. Such is not the case. Each student will have a unique sequence of work; thus every new project should be viewed as requiring some pre-project preparation. There should be on the project document a statement of what readings, facts, competencies, and supporting information the student should have before commencing the project. The inclusion of this element will help the teacher avoid assignment of projects requiring backgrounds not possessed by the student.

Step by Step Description. Some projects are designed with the philosophy of "let it be a challenge to you." Such projects, after an introductory description, conclude with a statement, "when you have completed this, have your instructor check it." Preparation of projects in this manner abdicate the key role that the project should play in developing learning within the student. The student needs to be guided, sometimes very specifically, other times more generally; but guided he must be. The step by step description of what is to be done is the real guts of a project. It is this portion that develops the skills, understandings, and attitudes within the student. It is this portion that gives the direction and guidance to the student in the absence of the teachers. Without step by step directions to guide the student, the project runs the risk of generating a major misdirection of student learning. Through step by step guidelines the student will know when he is to check progress with the teacher. He will know the sequence in which the work is to be done. He will know how he is progressing in light of the total activity to be performed. The importance of corrective information to effective learning has been stressed. Through carefully planned step by step descriptions appropriate check points for possible corrective information can be built into the project.

Evaluation. The project document should contain a provision for an explanation of the process to be used in evaluation. Two types of evaluation should be carried out. The teacher should make an analytical evaluation of the project completed by the student. This would reveal the nature and degree of learnings accomplished. The student should make his own evaluation on the degree of learning he felt he had received and satisfaction the learning has given him in light of his occupational goal. The evaluation aspect of the project is somewhat akin to the objectives. The specific provisions for this element may not be found on the document, but the general provision for this should be at least outlined.

These various elements although all necessary are not of equal importance. The three key elements which should receive the greatest amount of concern in project development would be: (1) the purpose and objectives, (2) the step by step description, and (3) the evaluation phase. The fact that two of these three involve extra effort not specifically provided for on a project document should alert teacher educators to the importance of stressing these phases in teacher education classes. Because the detail on objectives and evaluation are not apt to be provided, they may get only minimal treatment in actual practice.

The following check-list provides a listing of each essential element to be contained within a project.

Descriptive Title

Gives area and nature of study.

Objective or Purpose

Rationale provided and project is in sufficient detail to suggest possible outcomes.

Nature and Scope

Nature of activity given, learning identified, and level of activity stated.

Materials, Equipment, and Resources

All special items listed and unusual usage of standard items given.

Pre-Project Preparation

Statement of readings, facts, competencies, and supporting information expected of student.

Step by Step Description

A step by step and phase by phase guide is given which assures the correct sequence for learning.

Evaluation

Provision for both teacher and student evaluation that will lead to next experience.

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Desired Outcomes of Projects*

Why is this seminar on building an understanding of project training necessary? Why is it essential to have training institutes for preparatory project distributive education teachers this coming summer? Why did the U.S. Office of Education hold the National Clinic on Distributive Education in October of 1963, or the national conference in January and February of this year? Is it because the participants of these conferences and training sessions have not sufficiently mastered marketing and merchandising content materials? Is it because the teacher-educators here today lack sophistication in teaching methods and other aspects of pedagogy? Is it to stimulate research in project plan teaching methods and operation? Although these may be contributing factors, it hardly seems reasonable that they warrant so much expenditure of time and money. What then is the real reason back of this attention to the project plan? To arrive at an answer, we must look back to the Vocational Act of 1963.

For the first time in the history of distributive education, Public Law 88-210 provided for federal participation in the reimbursement of pre-employment instructors' salaries in secondary and post-secondary public schools. Distributive educators who had spent years in developing effective and relatively efficient cooperative programs were apprehensive about pre-employment courses, and for a very good reason. They recalled the plight of distributive education prior to the George-Deen Act when in many schools the total distributive education program was a course in general salesmanship taught by almost any teacher, whether or not qualified--a dumping ground for poor students and an academic laughing stock.

THE PRUPOSE OF PROJECT TRAINING IN D.E.

To a major portion of distributive educators pre-employment instruction represented a threat to the entire distributive education program. In the minds of these seasoned teachers and supervisors, the problem was not a matter of rejecting pre-employment instruction (the need and potential were obvious), but a task of providing safeguards to assuring the vocationality of instruction at this new level. Many of you will recall the four check points voiced by John Beaumont and his staff at the National Clinic of 1963: (1) the student -- George Sanders introduced us to the career-goal requirement and the Standard Industrial Classification (S.I.C.).

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* Prepared by Warren G. Meyer, Professor of Education and Head Distributive Teacher Educator, University of Minnesota, for the 1967 National Seminar in Distributive Teacher Education

(2) the content -- Edwin Nelson treated competency areas and stressed the marketing functions. (3) the method -- Mary Marks stressed the project plan, and (4) the teacher's experience and training in distributive occupations. Repeating these check points for insuring the vocationality of instruction -- they are the student, the content, the method and the teacher. The reason, then, for this stress on the project plan is to help insure that instruction contributes directly to the development of vocational competencies. In my opinion, the purpose of our meetings since 1963 has been to work together in constructing a plan and a procedure to assure that high school and post-high school students who enroll in pre-employment classes will develop "saleable skills" in distributive occupations. This is our purpose -- our instructional aim and scope.

THE IMPORTANCE OF OBJECTIVES IN D.E.

The "central" problem in distributive education today is not the improvement of instruction under the project plan -- it is the derivation and statement of instructional objectives. This is not meant to discredit the project plan for pre-employment training. It is second only to the cooperative plan for our purposes. The derivation and statement of instructional objectives has been the real central problem ever since D.E. originated at the turn of the century. It was the central problem during the years that the cooperative plan reigned supreme, though the urgency was not as great. Cooperative training provided some built-in assurances that the students would develop certain groups of occupational competencies by virtue of the fact that regular occupational experience was an integral part of the program. Now that projects have been substituted for on-the-job training in the new scheme of instruction, the evaluative function of the employer and co-workers does not operate nearly as effectively.

Distributive occupations happen to fall in an occupational group that is people-oriented. In Gagne's[1] continuum of occupational groups from hardware to people, distributive occupations are almost entirely located in the extreme right category labeled "People." We are proud of being located in this wonderful category, but we pay a high price for being there from a pedagogical viewpoint. Our colleagues in mechanical, electrical, spacial, biological-chemical, and symbolic categories deal with tangible and concrete instructional outcomes to a much greater degree than we do. It is much easier to identify and measure competencies that are relatively concrete and exact like some aspect of typewriting, bookkeeping, lathe operation or cooking, than it is in selling, exchanging merchandise for customers, or granting consumer credit. It has always seemed to me that the urgency of the need for valid, well-defined objectives is greater in our field than in other vocational spheres, partly because of the complexity of the people-oriented nature of distribution and the lack of appreciation of the distributive occupations by the lay public. Fortunately for distributive education, research has recently provided us with some devices for deriving and formulating educational objectives which hold great promise if we will learn to use them well.

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[1] Gagne, Robert M., principal investigator, Research on General Vocational Capabilities (Final Report) prepared by James W. Altman, Project Director, Institute for Performance Technology, American Institute for Research, Pittsburgh, Pennsylvania, Conducted under a grant from the Ford Foundation. March, 1966.

SOURCES OF INFORMATION ABOUT WORK EXPERIENCE

One year ago the George Washington University Human Resources Research Office (HumRRO) operating under contract with the Department of the Army did an exhaustive study of research and other literature on educational objectives from which I draw extensively for the suggestion I shall pass along to you. Harry L. Ammerman and William H. Melching,[2] the investigators, drew a chart of derivation procedures (page 31-32) in arriving at "terminal objectives" which they grouped according to (1) Procedures for determining what is relevant to the work situation, (2) Procedures for determing what is critical for instruction, and (3) Procedures for determining relevance and criticalness. These sources were rated by the investigators according to their applicability to types of "terminal objectives." The numbers in parentheses refer to references in the bibliography of the study. I shall explain the factors later.

TERMINOLOGY

As you know, there has been a great deal of confusion about terminology associated with instructional objectives, so the investigators constructed this chart (page 17) which groups objectives into three categories (1) General Objectives, (2) Terminal Objectives, and (3) Enabling Objectives.

You will notice under the category "General Objectives" the term "Broad Instructional Aims and Scope" which may be applied to the program as a whole or to a broad aspect of the program such as a course. A "Terminal Objective," or terminal student performance objective, is a meaningful unit of performance relevant to the work performance situation, and critical for instruction. It is an activity that would be done in its own right in an intended work situation. It should be stated at the level required for effective use at work. According to the investigators, an "Enabling Objective" consists the component actions, knowledges, skills, and so forth, the student must learn if he is to attain the terminal objectives. These bridge the gap between where the student is at the beginning of instruction and where he should be upon completion of instruction. Enabling objectives may also consist of basic factual and conceptual knowledge serving as background information for terminal objectives.

In a suggested course guide titled Economics for Young Workers prepared by the distributive education staff at the University of Minnesota for the U.S. Office of Education,[3] the course outline was presented as enabling objectives in a "T" chart. You will note the terminal objectives at the top of the page and the enabling objectives in the right-hand column. Also note the presence of cognitive and affective objectives among both the terminal and enabling objectives.

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[2] Ammerman, Harry L. and William H. Mehching, The Derivation, Analysis and Classification of Instructional Objectives. Technical Report 66-4 George Washington University Human Resources Research Office operating under contract with the Army. May, 1966.

[3] U.S. Office of Education, Economics for Young Workers. A Suggested Course Guide for Developing Economic Competencies, Developed persuant to a contract with the Office of Education by the University of Minnesota, 1966.

STRUCTURAL COMPONENTS OF A TERMINAL OBJECTIVE

I found the HumRRO study very helpful in its identification of the structural components of the statement of an objective. These are (1) the action statement, (2) the performance standards, and (3) the performance conditions. The clarity, completeness, and precision of these three parts of a statement determine its effectiveness. They enter into the factors used in classifying objectives.

FACTORS ON WHICH OBJECTIVES VARY

Although we had used the Taxonomy of Educational Objectives Handbooks, I[4] and II[5], I was not aware of the factors involved in classifying objectives. Consequently I found them very interesting and helpful. Ammerman and Melching concluded that five factors accounted for the significant ways in which most performance objectives differ. These factors are: (A) Type of performance unit, (B) Extent of action description, (C) Relevancy of student action, (D) Completeness of structural components, and (E) Precision of each structural component. Although it takes some study time to become conversant with these factors, we felt that the time was well spent and have observed that our students in a graduate class have produced more appropriate and better stated objectives than before studying the factors.

FACTOR A -- TYPE OF PERFORMANCE UNIT

Terminal student performance objectives may be of three types: specific tasks, generalized skills, and generalized behaviors. A specific task is one particular activity which has value in and of itself in a specific work situation. It has a clear beginning and ending point and is typically performed within a short period of time. For example, ring up a cash sale accurately on a simple cash register. A generalized skill is the performance of a specific activity in a variety of related but not identical situations. The skill is not limited to a single set of circumstances, or a unique environment. For example, make an appropriate merchandise approach. A generalized behavior refers to a general manner of performance or way of behaving. It is more of a characteristic way of doing things than a skill. It is like a personality trait that can be modified through instruction. Moral codes, values, and concepts needed in a work situation are included under this category. For example, establish good relations with his co-workers.

Knowledge of these types of terminal behavioral objectives later lead me to an appreciation of the relative difficulties among types of behavior within D.E. and between the task of constructing objectives in our field and those at the hardware end of the hardware-to-people continuum. For example, in a people-centered occupational field many of the terminal objectives are in the generalized action situations -- that is, generalized skill and generalized behavior -- which require outcomes in the higher eschelons of the cognitive and affective domains.

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[4] Bloom, Benjamin S. et. al., Taxonomy of Educational Objectives, Handbook I: Cognitive Domain. New York: David McKay Company, Inc. 1956. 207 pp.

[5] Krathwohl, David R., Benjamin S. Bloom, and Bertram B. Masia, Taxonomy of Educational Objectives, Handbook II: Affective Domain. New York: David McKay Company, Inc. 1964. 196 pp.

FACTOR B -- EXTENT OF ACTION DESCRIPTION

The HumRRO study suggests three levels in classifying the action part of a statement describing an educational objective: Level 1, Fully described; Level 2, Partially described; and Level 3, Stated only. Some objectives may be stated so that all the required actions are fully described, indicating how, when and why the action is performed. Specific tasks are most likely to be stated well enough to reach the "fully described" level; it would be extremely difficult and impractical to state a generalized behavior fully. Task descriptions include the steps that make up the task procedure; descriptions of generalized behaviors consist of representative actions that indicate the desired behavior. For example, a generalized behavior may be stated as follows: "Maintain an awareness of safety hazards when working in a stock room by such action as: (a) Keeps the aisles clear. (b) Uses a step-ladder to reach high shelves, and so on. Comprehension of the Taxonomy of Educational Objectives is very helpful in preparing and/or evaluating an objective on this factor.

FACTOR C -- RELEVANCY OF STUDENT ACTION TO WORK SITUATION

Factor C -- Relevancy of student action to work situation classifies the closeness of the statement to actual job performance. Three levels of relevance are used: Level 1, High relevance; Level 2, Moderate relevance; and Level 3, Low relevance. The statement of an objective will likely have high relevance to a work situation if the substance of the objective has been derived from a real work situation. When an objective requires the student to engage in an activity that is not required or performed in the work situation, it is classified as having low relevance. For example, objectives which ask the student to "list," "describe," "select from a list," and so forth are academic and are not usually terminal student performance objectives; however, they may be enabling objectives--though not necessarily good ones.

The relevancy factor is applied to each of the structural components of an objective -- action statement, performance standards, and performance conditions. High relevance to the work situation exists if all the stated structural components of an objective are identical or nearly identical to those found in the work situation.

FACTOR D -- COMPLETENESS OF THE STRUCTURAL COMPONENTS

Factor D relates to the number of structural components present in the statement of the objective. The three levels given in the HumRRO study are: Level 1, Fully complete -- the action statement, the performance standard, and the performance conditions are present. Level 2, Partially complete -- a statement of an objective that indicates the action required of the learner plus either the condition under which the action must occur, or the performance standard would be considered a partially complete statement. Level 3, Action only -- here the performance standard and the performance conditions are absent.

FACTOR E -- PRECISION OF EACH STRUCTURAL COMPONENT

Factor E deals with how explicit the statement of the objective is with regard to each structural component. Just as the completeness of each component was considered, the precision with which each component is stated may be considered. The levels used in classifying an objective under Factor E are: Level 1, Fully precise -- the three structural components (action statement, performance standard, and performance conditions) are clear and precise. Level 2, Partially precise -- one or more of the components are not explicit. Misunderstanding of the intent of the person(s) who wrote the objective usually results from a failure to specify clearly the performance standards or performance conditions. Level 3, Vague -- If all of the structural components are not explicit, the statement will be too diffuse or too vague to be of much use to anyone. Comprehension of the Taxonomy of Educational Objectives is very helpful in preparing and/or evaluating an objective on this factor.

CLASSIFICATION OF TERMINAL OBJECTIVES

Persons, who comprehend the five factors on which terminal student performance objectives may differ and the levels for each, can classify or code any terminal objective by a five-digit number. The first digit gives the level of Factor A, the second digit the level of Factor B, and so on. Using this code, any person knowledgeable with the work situation could rapidly provide adequate codings for a set of objectives. You will recall that the factors were used to classify the derivation procedures on the chart (pages 31-32) referred to earlier.

At this point you may wish to try your hand at classifying objectives. Here is a chart which will help you recall the levels of classification within each of the five factors.

Practice objective No. 1

"Ring up cash sale on a Model 21 (small) National Cash Register."

Classification by this reporter: 1, 3, 2, 3, 3.

Now let's try to improve this objective a bit and restate it.

"Ring up cash sales on a Model 21 NCR in a variety store making not more than one error per day."

Classification by this reporter: 1, 3, 1, 2, 2.

Now let's try a generalized skill for Practice Objective No. 2

"Relate product information to customer benefits."

Classification by this reporter: 2, 3, 3, 3, 3.

Knowing some of this statement's weaknesses, let's see if we can improve upon it.

"Associate product feature with benefits to the customer as applied in constructing an interior display, including such activities as

the following:
   a. Identifying the product features.
   b. Locating sources of information about the product.
   c. Identifying the benefits customers receive from the product feature.
   d. Selecting the copy for a showcard.

Classification by this reporter: 2, 2, 2, 2, 2.

For our last practice objective, let's take a generalized behavior.

"Takes the initiative in gaining the acceptance of his co-workers at his place of employment, using such methods as:
   a. Talking with co-workers concerning their interests.
   b. Doing small favors when appropriate.
   c. Determining who the leaders are.
   d. Studying the subgroup structure of the department.

Classification by this reporter: 3, 2, 2, 2, 2.

May I suggest that at an appropriate time during your work in the task force sessions you give some attention to the use of the five factors in sharpening instructional objectives. Don't expect miracles; it takes time to learn the concepts and master the techniques. There is no pat, easy answer to deriving and formulating good terminal student performance objectives. You earn what you get from this tool.

THE TAXONOMY OF EDUCATIONAL OBJECTIVES

You will recall my having mentioned the Taxonomy of Educational Objectives, when discussing Factor B (Extent to which the action or behavior is described) and Factor E (Precision of each structural component). Since Handbook I dealing with the cognitive domain was published in 1956 and Handbook II treating the affective domain in 1964, sophisticated teacher educators are well acquainted with these tools. However, some of the newer members of the profession may not have had the opportunity to use them, so in the remaining time I shall briefly relate my opinion regarding their function and relationship to the factors just discussed.

After having derived the raw material for an educational objective, the decision makers must determine the specific nature of the desired outcome(s). The taxonomy serves as a guide in locating the type of outcome desired. It also serves as a guide in testing or evaluating the learner's achievement in that particular behavior. Our experience seems to indicate that young teachers now entering distributive education who are familiar with the Taxonomy of Educational Objectives do much less teaching and testing in the knowledge realm of the cognitive domain and are more inclined to aim for the application category or higher, depending on the content.

In similar manner, these young teachers are keenly aware of the value of affective domain outcomes. They realize that this type of outcome is relatively long lived and that it is particularly adapted to people-oriented occupations in general and merchandising occupations in particular.

These teachers are not confused by elastic terms such as interest, appreciation, attitude, value and adjustment which cover a wide range of behaviors.

Many of you are aware of the recent work on the psychomotor domain done by Dr. Elizabeth Simpson, past president of the American Vocational Association. You may obtain copies of her report for a small charge by writing Dr. Elizabeth Simpson, Chairman of Home Economics Education, University of Illinois, Urbana.

To summarize, let me cite a chart taken from the Ammerman and Melching study (page 12) to place my remarks in context.

1. We discussed the derivation of objectives from work performance situations, and you were shown a chart of derivation procedures, which were grouped according to relevancy to the work situation, criticalness for instruction, and both relevance and criticalness.

2. We discussed terminology, grouped various terms under categories titled "general objectives," "terminal objectives," and "enabling objectives." Instructional Aim and Scope is the term used for general objective in the HumRRO study.

3. Next we identified the structural components of a terminal objective: action statement, performance standard, and performance condition.

4. We then discussed the five factors of terminal objective classification. Type of performance unit, Extent of action description, Relevancy of student action to work situation, Completeness of structural components, and Precision of each structural component.

5. Finally, I attempted to show the relationship of the Taxonomies of Educational Objectives to the five factors of the HumRRO classification of terminal objectives.

The blocks of the chart which were not discussed are the enabling objectives and the design of the learning experiences. Ammerman and Melching do not place achievement testing in the developmental chain because they believe that in doing so there is a tendency toward academic influence and away from relevance to the work situation. The flow line at the right shows what the investigators think happens under the subject matter approach used traditionally.

Development of a Matrix*

The desire to build the ideal model for distributive education has probably been within the heart of every distributive teacher educator one or more times during a professional career. Certainly it is such thoughts and the occasional opportunity for real "think sessions" that tend to produce some of the long range innovations in distributive teacher education. The desire to "box in" the total range of projects potentially possible within distributive education has prompted the preparation of this paper.

WHY A MATRIX?

Even the perpetual optimist has some sense of realism, and because of this, the step from nothing to a full blown model is not attempted here. A matrix is defined as a rectangular (could be square also) array of elements considered as a single entity. If a satisfactory matrix can be designed, the movement from what is generally conceived as two dimensional to a model which more than likely will be three dimensional would be the next logical step. The connotation of matrix here, i.e., an array of elements considered as a single entity, should provide a sufficient challenge within the time limits of this seminar.

HOW DO WE ORGANIZE KNOWLEDGE?

The structuring, ordering, classifying, and/or organizing of knowledge, ideas, objectives, or intellectual content has been attempted many times. Three examples will be given here that may provide some stimulation by way of example. The Structure of Intellect - J. P. Guilford has strived for a comprehensive theory of intellect. This has been generated by factor-analytic methods, which over the years have lead to undiscovered, differential intellectual abilities. The model has three kinds of content, five kinds of operations, and six kinds of products involved in intellectual performances. The theoretical model for the complete structure of intellect is shown on the next page. (Guilford - 1964, p. 129)

This model suggests that there should be about 90 primary intellectual abilities (3x5x6). About 50 of the primary intellectual abilities are now known through factorial investigations. (Guildord - 1964, p. 127)

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* Prepared by Dr. Harland E. Samson, Teacher Educator in Distributive Education and Associate Professor at the University of Wisconsin, Madison, Wisconsin, for the 1967 National Seminar in Distributive Teacher Education

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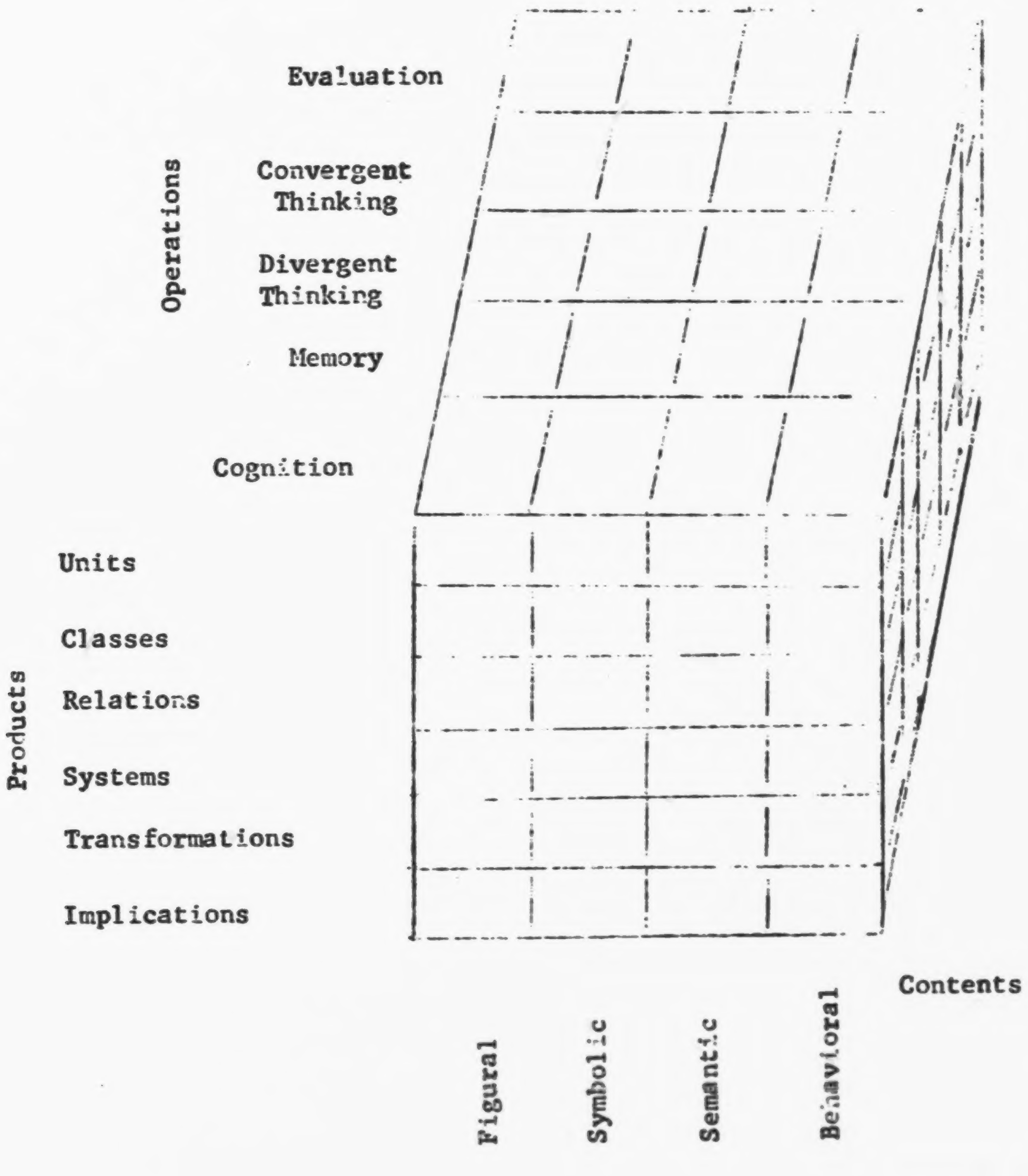
Operations
Evaluation
Convergent Thinking
Divergent Thinking
Memory
Cognition
Products
Units
Classes
Relations
Systems
Transformations
Implications
Contents
Figural
Symbolic
Semantic
Behavioral

NATURE OF KNOWLEDGE

In an attempt to bring some type of order to the expanding nature of knowledge numerous designs have been proposed. The proposal by Maccia (Maccia 1965) has particular pertinence to distributive education for it recognizes the need for man to know how to do things efficiently. Four possible categories are presented - Form theory (speculation with respect to structures), event theory (speculation with respect to occurances), valuation theory (speculation as to worthwhileness), and praxilogical theory (speculation about appropriate and efficient means to attain what is valuable). The point of interest to vocational educators is that regardless of the sophistication of formal theory, event theory, and valuation theory there is need for the fourth discipline, "praxilogical theory," to do what is deemed necessary in an efficient manner. As distributive educators, we should give consideration to the practice aspect of knowledge as we plan training programs, for it is our contribution to this category that will measure our usefulness to society.

EDUCATIONAL OBJECTIVES

One of the most helpful approaches to planning educational objectives is the "taxonomical" approach presented by Bloom and others (Bloom 1956). Their design was to have a complete taxonomy in three domains; cognitive, affective, and psychomotor. The purpose was to permit the classification of all possible educational objectives which could be stated as descriptions of student behavior. "Curriculum builders should find that taxonomy helps them to specify objectives so that it becomes easier to plan learning experiences and prepare evaluation devices." (Bloom - 1956, p. 2) Another paper at this conference deals specifically with objectives so no additional points on this scheme will be made. Mention is made only to alert work groups to the possibility of using the three domains and the levels of the taxonomy as dimensions of a matrix.

WHAT IS THE NATURE OF VOCATIONAL CAPABILITIES?

In a study to develop the domain of general vocational capabilities Altman created content categories along a hardware-to-people continuum. (Altman-1966). These were cross cut by a set of psychological processes arranged in a hierarchy of complexity -- sensing, detecting, rote sequencing, discriminating, coding, classifying, discrete estimating, continuous tracking, logical manipulation, rule using,decision making, and problem solving. These content areas and psychological processes, both listed below, served as the dimensions of a matrix. The scheme suggested the relative place of distributive education within all vocational areas and may suggest a sub-matrix appropriate for just distributive education.

AREAS

MECHANICAL

ELECTRICAL

SPATIAL

CHEMICAL-BIOLOGICAL

SYMBOLIC

PEOPLE
(human relations)

(Altman-1966, p. xii)

PROCESSES

Sensing--perceiving a difference in physical energies impinging on a single sense modality.

Detecting--perceiving the appearance of a target within a background field.

Discriminating or identifying--perceiving the appearance of a given target as distinct from other similar targets. Includes most association of nomenclature and locations with required job operations.

Coding--translating a perceived stimulus into another form, locus, or language, not necessarily involving the application of a sequence of logical rules.

Classifying--perceiving an object or target as representative of a particular class, where the objective characteristics of targets within the class may be widely dissimilar.

Estimating--perceiving distance, size, and/or rate without the application of measurement instruments.

Chaining or rote sequencing--following a prespecified order in carrying out a procedure.

Logical manipulation--application of formal rules of logic and/or computation to an input as a basis for determining the appropriate output.

Rule using--executing a course of action by the application of a rule or principle.

Decision making--choosing one out of a field of alternative actions, including the following of optimum strategy in non-rote behavioral sequencing.

Problem solving--resolving courses of action where routine application of rules for logical manipulation and decision making would be inadequate for an optimum choice. This would seem to imply the integration and adaptation of existing principles into novel, specialized, or higher-order rules.

(Altman-1966, p. 111)

COMPETENCIES IN DISTRIBUTIVE EDUCATION

The range of possible schemes for distributive education goes from the simple, but complete structure of Nelson (Nelson-1963) to the rather monumental research effort by Crawford (Crawford-1967). Although the latter study has its focus upon teacher education, the potential for use in several other ways does exist.

The structure originated by Nelson has developed through usage to a five category system: Competency in Marketing, Competency in Social Ethics, Competency in Technology, Competency in Basic Skills, and Competency in Economics. The obvious shortcoming of this for use in matrix development is that the categories are not equal in scope. The marketing competency needs to be sub-divided to give adequate consideration to the elements of marketing. This has been done by several states in local curriculum development. The Virginia plan which has the marketing area in these sub-divisions: advertising, salesmanship, merchandising, receiving and marking. (Ely-1965)

A study by Ertel focuses on merchandising occupations. (Ertel-1966). Twelve categories of activity and 332 tasks were identified. The findings of this study would be helpful in designing a scheme for programs oriented to the merchandising types of businesses. The 12 categories are:

1. Selling
2. Keeping and Counting Stock
3. Operating Checkstand and Sales Register
4. Receiving, Checking and Marking Merchandise
5. Delivery
6. Keeping Accounts and Records
7. Computing Information Using Mathematic Skills
8. Planning and Arranging Interior and Window Displays
9. Planning, Preparing, and Placing Advertisements
10. Buying Merchandise for Resale
11. Pricing Merchandise
12. Controlling Merchandise

LEVELS OF PERFORMANCE IN DISTRIBUTIVE OCCUPATIONS

The job level has frequently been used as a means of indicating level of performance in distributive occupations. Most commonly we hear and read of "entry" or "basic," "career or developmental," and "specialist" or "middle management." Although these are descriptive they are not particularly useful in educational planning. It is my view that a more useful breakdown would be one following the taxonomy of educational objectives. Six levels are suggested going from simple to complex in terms of student learning.

These six levels of activities should be part of the sequence planned for every student who is gaining his vocational application through participating activities. These six are described with their basic characteristics as follows:

1. Facts and information. In this first level the student would become acquainted with facts about distribution, the various functions, and the definitions of simple terms.

2. Processes and terminology. At this level he would learn the order of steps to be followed in routine activities, sequences in the process, and the association of terms with their generalized meaning.

3. Fundamental activities. This would include the carrying out of tasks assigned in either written or oral manner; the development of skill and accuracy in following a single routine; and the ability to effectively replicate in a working condition demonstrated skills and procedures.

4. Basic job activities. This would require that the student identify elements within a task or steps within a process. He would be expected to solve, independently, basic job problems and would combine various fundamental activities into his behavior in order to perform all the tasks of a complete basic job or occupational position.

5. Operational level activities. At this level the student would be expected to draw conclusions from several incidents, and from these generalize to new problems or new job situations. Also, he would be expected to hypothesize outcomes if certain procedures or actions were taken and make appropriate decisions. This level would require that he have a fairly high degree of competence in functional, product, and social skills.

6. Management level activities. At this level he would have to be able to make judgments, determine values, and perhaps extend these to fields outside that for which he had been basically prepared. The student would also be expected to interpret action, trends, and to project these into action or policy.

When the student is entering the initial phase of his occupational preparation, he will need facts and information about it. As he progresses, he will need to know about the process and terminology. This would be followed then by activities or experiences which would allow him to practice, in the most realistic situation possible, the processes and simple procedures which he has learned. Knowing something of these fundamental activities he could then begin to group these into basic job activities representing the complex of work carried out by the beginning worker. From this he could move on to operational activities and, time and talent permitting, perhaps explore aspects of management activities. (Samson-1966)

SAMPLE MATRICES

The attached tables provide sample two-demensional matrices for use in developing and assigning marketing projects for distributive students. Movement to a three-dimensional matrix could be accomplished by adding grade level, SIC classification, or other factors.

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MARKETING COMPETENCY

LEVEL OF STUDY	AREAS OF STUDY						
	Buying	Selling	Sales Promotion	Transportation and Storage	Standardization and Grading	Financing - Risk Taking	Market Information
Management Activities							
Operational Activities							
Basic Job Activities							
Fundamental Tasks							
Processes and Terminology							
Facts and Information							

TECHNOLOGICAL COMPETENCY

LEVEL OF STUDY	AREAS OF STUDY				
	PRODUCT INFORMATION	PRODUCT APPLICATION	PRODUCT INNOVATION	MANUFACTURER	DISTRIBUTION
Management Activities					
Operational Activities					
Basic Job Activities					
Fundamental Tasks					
Processes and Terminology					
Facts and Information					

ECONOMIC COMPETENCY

LEVEL OF STUDY	AREAS OF STUDY				
	Macro-Economics	Micro-Economics	Marketing Sphere	Individual Firm	Personal
Management Activities					
Operational Activities					
Basic Job Activities					
Fundamental Tasks					
Processes and Terminology					
Facts and Information					

SOCIAL COMPETENCY

LEVEL OF STUDY	AREAS OF STUDY			
	Inter-Personal	Inter-Group	Occupational	Public
Management Activities				
Operational Activities				
Basic Job Activities				
Fundamental Tasks				
Processes and Terminology				
Facts and Information				

BASIC SKILL COMPETENCY

LEVEL OF STUDY	AREAS OF STUDY				
	Reading	Oral Communication	Written Communication	Computation	Personal Hygiene
Management Activities					
Operational Activities					
Basic Job Activities					
Fundamental Tasks					
Processes and Terminology					
Facts and Information					

Variations of Time and Place Patterns in Project Training*

In planning for teaching distributive education by the project method, there are two basic variables which require a good deal of consideration--time and place. We need to know, or try to determine, the best, or at least the most attainable and yet effective, *mix* of these aspects of instruction. What, for example, is the ideal type of schedule of instruction time for eleventh graders studying distributive education by the project method? What is "best" for tenth graders, or for twelfth graders just beginning distributive education? How important is the school's proximity to the business community, or the fact that most of the students come to school by school bus? As you well realize, the answers to questions such as these depend very much upon your particular situation. We cannot, therefore, prescribe *the* arrangement through which project training is guaranteed to be a successful venture. My purpose here, then, is to discuss several possible alternatives to the question of time and place in project training.

The first variable, time, is used here to include both length of time in terms of the number of years of instruction involved and length of time in terms of the in-class instruction and/or laboratory periods. First, let's consider the question of distributive education by project training being a one-, two-, or three-year curricular pattern.

When we initiated our research program in the project method here at Michigan State University, I visited all the school districts that had expressed an interest in becoming involved in the research. These were rather hectic days. One such day, after I had explained the project method of instruction in distributive education to a superintendent, he asked me a very simple question: Is it a single course in the curriculum? I have to admit that up to that point I had not really given this aspect of project training too much thought. My only concerns *then* were to get classes taught by the project method established in a series of schools in Michigan. It is important to understand that only carefully thought-through curricular patterns can provide the needed support and stability for establishing project training classes. After I answered the superintendent's question, I took the time to develop several possible curricular patterns for project training. (See attached chart.)

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* Prepared by Edward T. Ferguson, Teacher Educator in Distributive Education and Project Leader, DE Preparatory Project Pilot Program, Research and Development Program in Vocational-Technical Education, Michigan State University, for the 1967 National Seminar in Distributive Teacher Education

To date, the research program underway here at MSU involves only the single-period, eleventh-grade (Career Development Level) curricular pattern.

Let's look at some possible arrangements regarding time in terms of scheduling and length of in-school sessions. A single period class is probably the simplest to initiate and maintain, as it is most closely parallel to the existing single-period concept of preparatory distributive education. A double-period class, back to back, might be considered a better approach, one with considerable merit. It would seem on the surface that an extended length of time can reap a fair amount of benefits -- time to complete a given task or project at one sitting; time to develop a lesson in theory and put it into practice; time to view and evaluate films; time for short trips and for limited observations in the business community.

On the other hand, two periods back to back could also present several problems. The task of scheduling itself could well be an insurmountable obstacle to a double period. In most small schools, this pattern could be quite prohibitive. Teacher-load time given to project training during a double period might be seriously questioned in relation to the teacher-pupil ratio. Difficulties of room scheduling is also another consideration in planning for double periods, since distributive education laboratory facilities are used by both project training and cooperative method classes.

Let us say, then, that two periods in succession for project training in distributive education would be ideal, but not always attainable, feasibly and economically.

Another arrangement is a single period of instruction followed by a laboratory session at another time during the school day. This is a pattern that may pose fewer administrative problems than the successive periods. There are also other distinct advantages. With this arrangement, the distributive education project method teacher may have possibly two or three classes in the morning and then have scheduled a block of time later in the day when he would be available for individual project work with his students. In this situation, the students have scheduled two or three or possibly five laboratory periods a week, in addition to a daily period of instruction. The distributive education teacher has scheduled, besides his teaching periods, a block of time every day for the individual aspect of the project method. A drawback for the distributive education teacher under this arrangement, however, is that he is hampered by this tie-up of time from being involved in coordination activities in the business community.

The second variable we are discussing today is place. Place can be considered here to mean both the actual teaching room in the school building and the geographic location of the school. At this point, I'd like to draw upon our experiences with relation to our research venture with the project method in 17 schools in Michigan, for some experimenting was done with "place."

In each of the 17 research schools there was a distributive education laboratory facility. On our visits to the schools, we saw many exciting and worthwhile projects coming forth through the use of the laboratory equipment. Stores were started as continuing class projects; demonstrations, role-playing situations, and display activities were undertaken utilizing the laboratory equipment. Most of our teachers found having laboratory facilities a tremendous asset. Perhaps even better and more continuous use of the laboratory can be obtained if this aspect is emphasized to a greater extent in the training of project method teachers.

With regard to geographic location, there is no doubt that close proximity to a trading area is ideal, for without this advantage the heart of project training -- the participating activities -- is severely hampered. Students in schools removed from distributive businesses are hardpressed to carry on meaningful projects. Lack of access to distributive businesses is a problem in suburban as well as rural communities. It is difficult for students to have to depend on parents on weekends to take them to the neighboring shopping areas. Our teachers whose students had easy access to a variety of distributive businesses had the greatest success in project training. There are, of course, ways of overcoming this problem. Some students have cars or access to cars and cooperative efforts can be made to bring groups of students and the business community closer together. In some cases, a teacher may have a school-owned vehicle at their disposal for a short period during the day. Public transportation facilities are also possibilities.

Certainly there are problems in planning for project training in distributive education. I feel there are none that are insurmountable as long as the teacher has the creativity and ingenuity and as long as there is a firm basis of administrative support and understanding of the project method and its variables.

CURRICULAR PATTERNS FOR PROJECT TRAINING

Preparatory Program (Project Method)	10th	11th	12th
Plan A		Single Period (Project Method) Basic Job Entry Level	Single Period (Project Method) Career Development Level
Plan B		Single Period (Project Method) Career Development Level	Single Period (Project Method) Career Development Level
Plan C			Double Period (Project Method) Career Development Level
Plan D		Single Period (Project Method) Basic Job Entry Level	Double Period (Project Method) Career Development Level
Plan E	Single Period (Project Method) Basic Job Entry Level	Single Period (Project Method) Career Development Level	Double Period (Project Method) Career Development Level

(Combination of Project and Cooperative Method)

Preparatory Program (Project Method) (Cooperative Method)			
Plan A		Single Period (Project Method) Career Development Level	Single Period (Cooperative Method) Career Development Level
Plan B	Single Period (Project Method) Basic Job Entry Level	Single Period (Project Method) Career Development Level	Single Period (Cooperative Method) Career Development Level
Plan C	Single Period (Project Method) Basic Job Entry Level	Single Period (Cooperative Method) Career Development Level	Single Period (Cooperative Method) Career Development Level (OR) Specialist Level

Using Appropriate Evaluation Techniques*

INTRODUCTION

The purpose of this paper is to raise some issues, questions, and problems regarding evaluation techniques of the project method of instruction. Greater emphasis has been placed on the utilization of projects in distributive education over the past several years. A number of states are employing the project method in preparatory classes. Several states conducted teacher coordinator workshops in the summer of 1966 to prepare teacher coordinators to use the project method as a means of simulating work experience. Some states are exploring with the idea of using this method in occupational clusters to supplement the traditional distributive education program. A number of monographs have recently appeared to use as supplementary information from publishers giving suggested projects. With all of this surge of interest in the project method, the question comes to mind," what are appropriate ways of evaluating the learning that is taking place."

OBSERVATION OF PROJECTS AND PROJECT EVALUATION

Many times a teacher coordinator becomes excited about developing and implementing a new project, but often fails to be cognizant of objectives in terms of adequate evaluation. Bloom (1956) feels that as objectives are being developed, then evaluation techniques should also be developed.

Sometimes a project is conducted just for the sake of conducting a project without much consideration for student achievement during the process. Haines and Ferguson (1966) mentioned that a project is only legitimate when the students labors can in some way be evaluated. This can only be done if evaluation is considered when the objectives for the project are developed.

Klausmeier (1966) points out that whether in a variety store, supermarket, or department store one sees many examples of customers and salespeople evaluating. It is the responsibility of the teacher coordinator to develop ways of assisting students in developing knowledge and skills of evaluating the activity of learners in the project method. The purpose of evaluation is to:

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* Prepared by Carroll B. Coakley, Teacher Educator for D.E. at the University of Tennessee, for the 1967 National Seminar in Distributive Teacher-Education.

1. Aid student progress
2. Be familiar with individual differences
3. Develop self understanding among the students
4. Understanding of abilities and characteristics
5. Evaluate projects in relationship to content
6. Guide the student in making career choices

Student evaluation of project learning activities should be a continuous process in order to ascertain that students are attaining or progressing through the learning levels. Samson (1966) suggests six levels of learning activities that a student may progress through, going from the simplest to the more complex:

1. Facts and information
2. Processes and terminology
3. Fundamental activities
4. Basic job activities
5. Operational level activities
6. Management level activities

How is a teacher coordinator going to evaluate the achievement of each level? The primary area of competency and the attainment level planned should be identified as one of the objectives in the planning stages of the project. One form of evaluation might be to evaluate whether or not the student attained the level and what was the degree of achievement.

Kilpatrick (1918) felt that a project should be one of purposing, planning, executing, and judging. It is the teacher coordinator's responsibility to guide a student through each step. These four steps should be carried out in each project within the six levels mentioned previously.

What are the necessary procedures to be carried out in evaluation. According to Herrick (1965) most teachers need to improve their evaluation programs at five major points:

1. Instructional goals should be stated and defined so that evaluations can be made of their accomplishment. Clearly perceived goals permit clear-cut evaluations.

2. The learning behavior of the student must be observed and recorded so that evaluations of that behavior can be made. Students should be pre-tested with valid interest and achievement tests prior to being programmed into the project method program. These same tests should be administered near the end of the year in order to measure achievement which may have taken place. Grades prior to entering the project method program and grades during the program could be recorded and analyzed to determine the effects which might occur.

3. The norms or standards by which the adequacy of the goal behavior is judged must be clear.

4. The judgments of value in the evaluation process must be used to improve the future behavior of the learner.

5. The role of the learner (students, teachers, etc.) must be enhanced in the evaluation process.

AREAS OF CONCERN IN EVALUATION

During the course of a project, a student may read, make observations, conduct field interviews, demonstrate, and conduct research. A certain amount of these activities can be evaluated based on student ability and achievement. This can be determined by some of the popular evaluative techniques such as rating scales, objective tests, essay tests, matching, and the like, of which we are all familiar. This is all well and good, but these techniques evaluate the tangibles. What about the intangibles? What about student attitude? What about personality development? What about poise and self-confidence?

Do we break down the projects into a series of rather specific judgments? Do we analyze this seriously to be sure that the entire process of evaluation is reliable in order that errors and difficulties are evident. The essay or the recall techniques which are used too frequently may not always focus on the desired intent of the project. Bruner(1960) says that a teacher is crucial in helping with evaluation, but much of it takes place by judgments of plausibility without actually being able to check rigorously whether we are correct in our effort.

EVALUATION OF THE COOPERATIVE METHOD

The Cooperative program has been fairly easy to evaluate because the effectiveness of the instructional program can be evaluated by the performance of the student on the job training station. Problems arising on the job can be taken up in class or in an individual student conference. A student can be evaluated by his employer periodically to determine his performance, productivity and progress on the job. Graduates of the cooperative program can be evaluated every year, two years, five years, and the like to determine the effectiveness of the program in career development. We are too young in the project method program to have students to measure since none have entered the world of work. They are not in a cooperative program, so this experience cannot be evaluated. Can the attitude of students on the project method be evaluated? What about student accomplishment on projects? What about student reaction to experiences with projects?

In the cooperative method, a training record for each student is kept to assure that the student progresses through various experiences in marketing and distribution. Would a training record be practical for a project method student? Could this be established to make certain that the student will be able to make a vocational application based on an occupational interest?

EVALUATIVE CRITERIA

Thus far we have talked about evaluation which is making a judgment in terms of a standard. In order to measure the learning outcomes, both the teacher coordinator and the student need some way of knowing what successful learning has taken place in projects. We need to determine the facts, information, processes, and terminology learned in marketing and distribution. The amount of skill that has been acquired in fundamental and basic job activities needs to be measured. The amount of progress that has been achieved in other desired learning activities should be determined. This could relate to individual student projects. The difficulties that students are incurring on projects should be measured. Some projects may be too long; therefore, student interest may be reduced. Some students may encounter difficulty in certain projects. Other projects may not be related to the instructional program and/or career objectives.

It would appear that one of the problems in evaluation of the projects is that we are not just evaluating the learning that is taking place within the curriculum,but that we are attempting to evaluate learning in relation to an occupational objective in marketing until the student has entered the work-a-day world?

EVALUATION OF ATTITUDES, INTERESTS, AND REACTIONS

Attitudes, interests, and reactions to projects and the project method can be evaluated. A student usually develops these attributes, or in some cases lack of attributes, as a result of participation experiences in projects. They are difficult to measure separately, but must be inferred from student reactions to many experiences within the project method which gives vocational application to the classroom content. Tests can be used in part in the determination of evaluation; however, other supportive data such as values, conduct, ability to make judgments, and the like should be utilized.

Attitude questionnaires and scales and interest questionnaires have been used to some degree in the evaluation of projects. In the use of programmed learning materials, achievement for an individual student can be measured rather effectively. It should be pointed up that programmed learning should be used only in part, because in training students for marketing and distribution it is important for them to have experiences other than controlled experiences.

A questionnaire to use with students on the projects has been developed to determine what effects projects have had on certain of their attitudes, level of accomplishments and reactions. The questionnaire consists of sixty questions. The student is asked to check each question on a five point scale.

The questions cover career objective, methodology, content, attitudes, and likes and dislikes of projects. The questionnaire has been pre-tested and was found to be reliable. It is now being employed in a study of project students in two states in the Midwest.

EVALUATION IN RELATION TO GOALS

In evaluating the project method, each project should in the very beginning of its inception have established attainable goals. Possibly beginning learning level projects will have only one or two goals until students have developed far enough along in a taxonomy. The method of evaluation for these objectives should be specified. The objectives as well as the evaluative criteria should be understood by the student. Each student should see a need for the project which should center around classroom content and/or an occupational objective and in some cases a career objective, whether a group or an individual project. The student should be encouraged to plan, direct and evaluate his own learning activities. The teacher coordinator will guide the total student activities, motivating and assisting whenever necessary. On certain projects a businessman may serve in this capacity whenever it is appropriate.

If objectives are established for each project in the beginning, then the evaluation techniques registering achievement will take place naturally during the course of the project. The evaluation techniques employed will vary depending on the project; however, in most cases they will be techniques employed in the cooperative method, but applied to the project method.

EVALUATION IN THE FUTURE

Those of us responsible for teacher education should look for innovative evaluation techniques which are not being used in distributive education classes. These techniques should be presented to in-service and pre-service groups so that they will become more cognizant of proper and consistent ways of evaluating learning. DECA club activities have been used to good advantage in evaluating achievement. More of these types of activities could be used in the project method classroom. Could closed circuit television and video tape be utilized in the evaluation of conceptual learning? Would it be possible to use simulated business games to determine student profit level and then as games are continuted, evaluate student ability in making proper decisions to increase profit? I am sure that there are other evaluative techniques which have not been attempted; therefore, I would like to challenge each one of you to discover other ways of evaluating student achievement in the project method.

Students in the project method program should be evaluated in a subjective manner, taking into consideration individual differences in ability, attitude, achievement, and interests. It must be remembered that not all of achievement can be evaluated, but one can only realize that these participating experiences do have more lasting and penetrating effect because, in many instances, the experiences have been simulated in such a way that they have given vocational application to a far greater degree than other forms of classroom instruction.

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Using Appropriate Materials and Media*

One of the major goals of every Distributive Teacher Educator is to provide each coordinator-in-training with an organized learning environment which provides with efficiency, the facilities, materials and media for student experience and understanding.

In Distributive Education this has been viewed traditionally as one in which the teacher plays the active role, serving as teacher counselor, information giver, and coordinator. Today, however, in the midst of social, marketing, business, and technological explosions in various fields of knowledge, as well as in the techniques by which this burgeoning knowledge is communicated, the Distributive Education teacher can no longer attempt to be the sole information giving instrument in the project classroom-laboratory.

The coordinator-teacher today can no longer keep pace with the expanding world of marketing and distribution.

Old teaching methods and aids and out-of-date teaching materials fail to compete with the increasing variety of up-to-date communication techniques to which students are exposed outside of school. In other words in our truly remarkable age, the task of effective teaching, the production and use of materials and teaching aids becomes ever more difficult.

This paper will only touch some of many aspects of Distributive Education materials and media. We will examine some of the stepping stones and some of the impediments to efficient teaching, to the project plan, to materials development and to related teaching aids.

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*Prepared by Mr. H. R. Cheshire, Teacher Educator, Distributive Education, University of Georgia, Athens, Georgia, for the 1967 National Seminar in Distributive Teacher Education

As the explosion of knowledge continues, Distributive Education Teachers are being assigned newer responsibilities in the technical areas. There is more and more to know, more scientific and technological importance and more simulated experience which the learner must be given before he can assume full and desirable participation in the rapidly expanding business world of today and tomorrow. Certainly the project plan can not hold all of the answers but it appears to be off to a very fine start.

We must also be realistic and realize that while in some areas we need new materials in others the teachers need to be selective because the supply appears to be unlimited.

Today materials and visual aids must be exciting, challenging and "real attention getters."

The Distributive Education teacher constantly finds himself in the midst of a battle for the attention of the project student. The significance of the battle is made particularly clear when we consider the amount of time the project student spends in school as compared with time he spends out of school under the influence of non-school-oriented communication devices and messages. The division of the pupil day looks like this for the average year. (6 hours per day -- 180 days per year)

In-school exposure	1080 hours
Out-of-school exposure	4395 hours
Sleep (9 hours each day)	3285 hours

As you can see for every one hour the student is exposed to classroom projects, instruction and media he spends four or more under the influence of non-school communications.

One teacher related this invasion of the portable radio:

> Occasionally someone answers my questions in a very loud voice. Then I realize--the student grins and, quickly removes the pocket radio ear plug. He has been listening to the morning news. It is more fascinating than I or the book, or the project. Solid state radios are everywhere. I'm not sure who's really listening to me.

A news stand owner told me "new comic books are selling better than ever." Why not look at the color, action, and excitement--better than the media and materials we've used in the cooperative Distributive Education programs and better than we use in our project classes.

I think the road is quite clear--we need to "get on the ball."

May I refer you please to Monograph 102 "Distributive Education Issues," by Roman F. Warmke, published by the South-Western Publishing Company in 1961. We must realize that these are opinions and that at this time the greater emphasis was still on the cooperative plan. I do think, however, that much can be salvaged for our thoughts for the project plan. May I quote from pages 38 and 39 of this monograph.

"47. Check-Sheet Statement. Student-learners in a cooperative D.E. program:

None	a. have little need for textbooks and reference materials
2 (4 percent)	b. should use one basic textbook with little or no references to supplemental books and materials.
22 (43 percent)	c. should use one basic textbook, but should refer frequently to supplemental reference books and materials.
16 (31 percent)	d. should use a series of reference materials with no one source.
6 (12 percent)	e. other: (Please Specify).
5 (10 percent)	No opinion.

Interpretation and Comments. The leaders were divided in their opinions about this issue. Two main contentions received nearly equal support:

1. Student-learners in cooperative D.E. programs should use one basic textbook, but should refer frequently to supplemental reference books and materials, and
2. Student-learners in a cooperative D.E. program should use a series of reference materials with no one source designated as the basic textbook.

The leaders were unanimously agreed that textbooks and reference materials were important.

Several respondents who favored the use of a basic textbook indicated that the use of a series of books and materials indicated that the use of a basic textbook was their second choice.

Dorothy E. Simmonds, P.B. Waters, and one other respondent suggested the use of a "locally developed course outline" with "ample reference materials provided."

H. D. Shotwell commented that textbook and reference materials used, "varies somewhat with the maturity of the student-learner."

Several other respondents made comments such as, "I cannot subscribe specifics. It depends upon the group from year to year."

Robert F. Kozelka stated that a lot "depends on the teacher-coordinator."

Peter G. Haines suggested using a basic textbook with frequent reference to supplemental reference books and materials "because most students' total experience has been with text-centered learning."

48. Check Sheet Statement. Should the D.E. classroom have a model store unit?

1 (2 percent)	a. never
9 (18 percent)	b. seldom
26 (51 percent)	c. usually
7 (14 percent)	d. always
8 (16 percent)	e. other: (Please Specify)

Interpretation and Comments. The leaders tended to agree that the D.E. classroom should usually have a model store unit.

David A. Thompson, Custer McDonald, Edwin L. Nelson, Pauline Burbrink, K. Otto Logan, R. S. Knouse, John R. Waldeck and several other respondents commented that a model store is desirable for effective instruction but not absolutely necessary.

John A. Beaumont stated: "Again, there can be exceptions. The teacher-coordinator must accept it (model store) as a method of teaching."

Several respondents stated that the model store need not be elaborate.

H. D. Shotwell commented: "The model store unit should not be the typical 'department store' type of unit, but perhaps a series including food, hard, and soft lines."

G. Henry Richert, in strong support of the use of a model store unit, commented: "I saw some fine examples in Europe of classrooms equipped with model stores. I believe we should use model stores whenever possible."

Oswald M. Hager stated: "We settle for less. We need more equipment."

Several respondents took the opposite view. One stated: "Why concentrate on pseudo operational facilities when actual laboratory training facilities and conditions are available in the business community."

Dorothy E. Simmonds noted that "the changing of displays is too time consuming."

49. Check-Sheet Statement. Approximately what percentage of the directly related class time in D.E. cooperative program do you believe should be devoted by the student-learner to the study of his specific job?

None	a.	none
3 (6 percent)	b.	less than one-fifth
10 (20 percent)	c.	one-fifth to one-fourth
11 (22 percent)	d.	one-fourth to one-third
12 (24 percent)	e.	one-third to one-half
8 (16 percent)	f.	one-half to three fourths
6 (12 percent)	g.	other: (Please Specify)
1 (2 percent)		No opinion

Interpretation and Comments. The leaders were so divided in their opinions about the amount of class time that should be devoted to specific job study that no one contention received 25 per cent of the respondents' support.

Oswald M. Hager, R. S. Knouse, Clyde W. Humphrey, and Robert F. Kozelka commented that the amount of specific, individualized job study depended upon the interest and maturity of the student-learners plus the teacher-coordinator's ability.

Harland E. Samson and T. Carl Brown commented that more individualized job study is done in the second year than the first when a "Plan A" program is in effect.

Two respondents commented that there was no way to formulate an opinion about this issue.

If we felt this way in 1961 it seems obvious that in 1967 with the project plan two points are very clear.

1. Every D.E. program needs a complete Distributive Education classroom-laboratory.
2. More materials and aids are needed aimed at the project plan.

QUESTION

Do we really match a visual aid to a specific point in the material being used in a curriculum or do we simply use what's already prepared or close at hand?

The content of the curriculum must be derived from marketing competencies designed to meet the student-teacher's objective.

The exciting teacher educator must match all of the pieces of the puzzle, (field trips, guest speakers, textbooks, teaching outlines, audio-visual aids, etc.) if the new Distributive Education project teacher is to receive a complete picture and be motivated for successful teaching.

COMMUNICATIONS AND THE PROJECT PLAN

In conversation with other teacher educators we all agree that coordinators in training are quick to copy the traits and methods of the teacher educators. Therefore, whatever and however we communicate our thoughts on the project plan, the cooperative plan, the curriculum, materials and aids--they probably will communicate to their students in the exact same manner just as a small boy might follow his father's tracks through a clean white field of deep snow.

As Distributive Educators, our prime responsibility is to accomplish things through people.

If the project plan is to be effective we must communicate. However. sound our ideas or well-reasoned our decisions, they become effective only as they are transmitted to others and achieve the desired action or reaction. We teach students techniques of coordination. We might rename this class techniques of communication and coordination. As our new teachers try their wings on coordination visits or set up downtown projects they will communicate not only with words but through their apparent attitudes and actions. How well they communicate can determine their success with all other parties involved in the project. The channels of communication must be clear and always open between teacher trainer and student because remember our traits and methods wear off on our product . . . . the classroom teacher or coordinator of Distributive Education.

ITEMS FOR CONSIDERATION--MATERIALS

THE DEVELOPMENT OF PROJECTS MATERIALS AND MEDIA BY OFF CAMPUS DISTRIBUTIVE EDUCATION EXTENSION CLASSES

Many teacher education programs of Distributive Education offer a series of classes off campus either for graduate credit or for teacher certification. What better testing laboratory could we ask for? These on-the-firing line teachers develop materials and test them as part of their course work.

Don't stop! Have the materials screened and when they are ready, have them duplicated for use by all other Distributive Education personnel.

USING A STUDENT HANDBOOK

Some of our coordinators in Georgia use an orientation handbook. This handbook contains not only the information and data necessary to organize and begin the teaching year; it also introduces the project plan and steps off the year by making both class project assignments and individual assignments.

FREE MATERIALS

We must never overlook the wealth of free materials available to all teachers. An excellent project for an undergraduate or a graduate student is to develop a manual listing all free materials available in the state. The materials should be screened and the manual should indicate which projects or which area of the curriculum is best suited to the proper use of same.

STATE RESEARCH COORDINATING UNITS

Let us not think of ourselves as being the only individuals or resources for the development of teaching materials, methods and media. Never before have there been so many helping hands available. We have only ourselves to blame if we do not seek the cooperation of our RCU's.

Increased emphasis should be placed on research--on curriculum development, teaching aids and methods, and the training of teachers, supervisors, coordinators and research personnel. This is necessary to make the program more progressively dynamic.

USING OUR LOCAL BUSINESS COMMUNITY

We already have broad coverage in our states through coordinator-teachers who have established good working relationships with managers. We are in position to increase and improve these relationships.

Additional support from business associations, organizations and individual firms should be sought. They can assist by supplying teaching guides, films and other instructional aids; by participation in the development of teaching materials; through part-time instruction and special lectures; by facilitating and encouraging student visits to business establishments, and in many other ways.

FUTURE RESEARCH

Long range research plans seem to be toward setting up a nucleus of Distributive Education information available to all Distributive Education programs. This would serve to speed up and increase pilot programs and improve present programs, and be of tremendous help to new people in the Distributive Education program. Through this nucleus of information, Distributive Education will be able to upgrade programs, facilities, and Distributive Education personnel.

JOINT EFFORTS

The need for each of the vocational services to understand the objectives of their sister services has become quite clear since the conception of Agri-DE programs. Now we need to examine the materials and aids which have a common use and disregard service lines.

USING STUDENT TEACHERS

Student teaching is that part of the pre-service education program in which the prospective teacher spends full-time working in a cooperating school with a competent supervising teacher. The period of student teaching is considered one of the most vital phases of the student's professional preparation. The student assumes increasing responsibility for working with a group or several groups of pupils. This experience provides the prospective teacher with opportunities to bring together educational theory with classroom practice.

The program at the University of Georgia is organized on a full-time basis for one quarter. The student earns 15 quarter hours of credit upon the satisfactory completion of the quarter's work.

The University utilizes the services of selected cooperating schools located in most instances within a hundred miles of the campus. The student is assigned to a competent teacher in his chosen teaching field. Several students, preferably in multiples of two's are placed in a given center during a particular quarter.

While in the center, the student devotes the full day, five days each week for a full quarter to student teaching responsibilities. All of the student's time is assigned to the classroom of the supervising coordinator. However, individual arrangements and projects are made according to the student's needs for short term observations in other classrooms, in training stations and in individualized instruction. The observations are planned cooperatively by the supervising teacher, the student teacher, the school principal, and the college supervisor.

Allow time and provide the facilities for student teachers to prepare and test materials and visual aids while they are out in the state student teaching. Assign projects or portions of projects to be tested in detail not just "tried." Compare results in a seminar at the close of the student teaching period.

THE PREPARATION OF MATERIALS BY DISTRIBUTIVE EDUCATION GRADUATE STUDENTS

Most people usually think of research as an investigation to discover new truths. However, in the business world many larger firms have research departments whose function it is to redesign an existing product. A graduate student can easily take any one area of instruction and either prepare new materials or redesign out-of-date teaching guides.

Many graduate students in Distributive Education are experienced coordinators and have a strong background in business. With these two strong points and the facilities of the University--they can prepare meaningful projects, visual aids and guides for the project plan and the co-op plan.

Their experience and knowledge can also be used to help prepare new teachers in undergraduate classes.

If you have a new graduate assistant, the following steps may help him as he begins to develop new materials or aids for the project plan.

Suggested steps to follow:

1. Assignment to a minimum of two educational research classes.
2. A review of current units of instruction.
3. Visits and interviews with experienced Distributive Education teacher-coordinators.
4. The assistance of several major professors.
5. Conferences with audio-visual departments.
6. Contact trade association.
7. Prepare draft of materials.
8. Review by major professors.
9. Consult Distributive Education teacher educator.
10. Production of materials.
11. Testing period in the field.
12. Revision and review.
13. Printing and distribution.

CREATIVITY THROUGH INVOLVEMENT

AUDIO-VISUAL MATERIALS

Chalkboards, erasers and chalk have long been the standard equipment for the average classroom teacher. It was not until recent years that Distributive Education teacher-coordinators offered anything approaching the media described on the following pages. This writer has not attempted to list all of the known audio-visual aids, but special note needs to be taken of several items because not only are they new and exciting but they hold promise for the project plan.

VIDEOTAPE RECORDER

Self-Evaluation. Can be used as an instantaneous "mirror" to let the student see and hear himself as he really "was." Record presentations to show in a suitable delayed time slot.

MULTIMEDIA USE

Using more than one media at a time for realistic presentations.

PROGRAMMED INSTRUCTION

A means by which information is provided for the student bit-by-bit, or in step-by-step sequences.

TEACHING MACHINES

Teaching machines can be very useful as we develop materials and projects, but an expert should be consulted before any commitments are made. Advisory committee, the project teacher can evaluate curriculums, programs, projects, training stations, career channels, guidance procedures, teaching materials and visual aids in terms of their realistic business value.

MEANINGFUL FIELDTRIPS

With clear cut objectives and goals, competent guides, a written agenda, and a follow-up or evaluation.

PROJECT INVENTION

Many students, if the learning situation presented to them is conductive, are capable of some degree of creative invention. Inventive creativity can be manifested in a variety of ways: traditional channels of distribution and marketing, hobbies, special interests, exhibits, career investigation, group leadership, and social channels.

MODERN CHALKBOARD

Not the traditional, but dull-finished plastic, moss-surfaced glass, paint-coated plywood or presswood, vitreous-coated steel and magnetic boards.

CARTOONS

May combine humorous appeal with technical knowledge.

1. Appropriateness to experience level
2. Clear illustrations
3. Simple -- yet motivate
4. Clear symbols

THREE DIMENSIONAL PROJECT MATERIALS

Models, objects, specimens, mock-ups, dioramas.

THE PROJECT DISPLAY

The project display is a learning experience, usually arranged on a flat vertical surface, which includes the use of a wide variety of materials. The project display uses diagrams, photos, pictures, graphs, news clippings, mobiles, 3-D objects and specimens. The floor or table may make the display 3-D.

COMMUNITY STUDY

Field trips, career guest speakers, follow-up studies, our system of government and economics. A first hand learning situation and most important--personal contacts are made.

PAPER-BACK BOOKS

For related reading, for individualized instruction, for product knowledge and career development.

AUDIO-LEARNING

Nearly 50 per cent of a typical class day is spent in listening activities. We need to make this more exciting, the learner must listen and then act. Our students need to improve their listening techniques. Examples: disk recordings, magnetic tapes, recording laboratories and libraries, educational radio.

EDUCATIONAL TELEVISION

State wide exchange of project ideas. Closed-circuit television.

BUSINESS GAMES

The elements of game theory focuses on the nature of decision making under conditions of conflict. To apply game theory to a practical problem solving situation, the student must (1) define problem (2) isolate variables (3) scrutinize and select in terms of probable efforts on each of the decisions.

MICRO-FILM

Microfilm is a special type of filmstrip on which pages of books, newspapers, magazines, and other project matter have been photographed in minature form. The film is placed in special viewers which enlarge the images to readable form. (Variation is microcards)

ERE (EDISON RESPONSIVE ENVIRONMENT)

A talking typewriter not only prints and pronounces a letter, figure, or symbol, it displays it and progresses to words and sentences. Can be programmed to teach.

SYSTEMS APPROACH

This approach involves the creative combination of a variety of skills and devices in the process of education (1) linear programming (2) simulation (3) P.E.R.T.

THE COMPUTER

Can now provide lessons tailored to individual needs so that a student can regulate the rate of inculcation, as it were in terms of his own ability to progress. The imparting of information can be done in writing, through still pictures, voice or a combination of these. Responses by the student can make this method meaningful--for example, business decision making.

MANAGEMENT DATA PROCESSING

The well-defined tools and techniques of management control information systems have been developed in many other aspects of the American economy and are now available to the schools. They afford the capability for immediate access to information and analysis on personnel administration, purchasing and procurement, administrative control, financial planning, and other management subsystems.

LOOP FILM OR SINGLE CONCEPT

8 mm or Super 8 film, a series of pictures usually run for approximately four minutes. Some have sound.

Control consoles for study carrels. Dial for instruction, films tapes, or other audio-visual devices.

TECH-A-MATION

Motion added to 2" x 2" slides or overhead transparencies.

MANUFACTURED PROFESSIONAL OVERHEAD TRANSPARENCIES DESIGNED SPECIFICALLY FOR THE DE CLASSROOM

Colonial Films, Inc., 71 Walton Street, N.W., Atlanta, Georgia 30303.

TWO SHOTS IN THE ARM FOR GEORGIA DE

Georgia Distributive Education teacher-coordinators have recently received "two shots" in their arms with regard to classroom presentation. They are: the overhead projector and the Kodak Carousel Projector.* From all across the state we are receiving favorable reactions from coordinators on both of these projectors.

The overhead projector has been on the state approved list of equipment for the past several years. This past year the Kodak Carousel Projector and automatic loading camera were added.

The Overhead

Our coordinators have made the overhead a working part of their Distributive Education classroom laboratory. The Distributive Education Department of the University of Georgia and the State Department are jointly assisting coordinators in the development of teaching transparencies that become a part of their daily lesson plans.

We are suggesting a three ring loose leaf notebook for each major teaching unit (examples: orientation, DECA, basic sales, advertising, display). Each notebook contains daily lesson plans, handout materials, news articles, student projects, guidelines for class discussion and the actual transparency. The transparencies are three hole punched and placed in the notebook for use at the time of class discussion.

For example, if a coordinator finds a good picture explaining a specific design to use during his presentation of visual merchandising, he will make his transparency, have it three hole punched and place it in his display notebook. Mountings are nice but certainly not necessary. When needed, the transparency is exactly where he needs it -- at his fingertips.

Our coordinators have discovered that the acetate roll is an excellent way to present a lot of facts and figures. It saves time and can be prepared in advance of class. The use of different colored marking pens will add life to your visual and at the same time will point with emphasis to the desired area.

Making the Transparencies

It's easy. One method the coordinators use is simply to run the material and the clear transparency paper through a copy machine. The process takes four seconds. Colors can be used then, or added later.

Should a teacher wish to add zest to his work he can use "clip art" or cartoon characters. By using a primary type the teacher can typewrite words large enough to be read easily when projected.

Simplicity seems to be the key to effective projections. Below are listed specific suggestions in developing Distributive Education transparencies for use with the overhead projector:

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*Kodak Carousel Projector and Kodak Instamatic Camera are trademarks of the Eastman Kodak Company, Rochester, New York.

1. Be simple, direct and to the point.
2. Present one major point on each projection--except in summary.
3. Use color or motion whenever possible.
4. Do not put too many words on any one transparency.

When using: (a) Be sure everyone can read the projection. (b) Cover items not being discussed. (c) Point to, or mark items for emphasis. (d) Turn off lamp after major points have been discussed. (e) Use an angled screen to correct keystone. (f) Move the screen around from place to place until students are satisfied.

There are several techniques for making transparencies for the overhead projector. We have found the following to be easy and successful: rubber cement transfer, color lift through a copy machine, self-sealing acetate, dry process through a copy machine or developing jar, liquid developer process and, of course, working directly on the acetate.

The Slide Projector

As with the overhead, several fine models of slide projectors are now on the market. The key to success in our program has been the fact that all coordinators are purchasing the same basic models . . . Kodak Carousel Projector (models: 700 and 800). This allows for easy exchange of slide trays.

If a coordinator in one section of the state needs a DECA presentation, he can borrow a complete series in a locked slide tray from across the state. Cardboard storage boxes simplify filing and mailing.

Each storage box comes equipped with a catalog sheet. Each slide can be titled and specific comments can be made. This allows for easy use and identification. For technical areas of marketing and merchandising, we suggest the coordinator originating the series, develop a detailed script to accompany the slides. As each new coordinator uses the series, he can make improvements and bring the series up to date.

Most of our coordinators are using the Kodak Instamatic Camera. This camera is relatively inexpensive and extremely simple to operate. It works well for both outdoor and indoor slides. One suggestion is that the photographer needs to stand close to the subject. For indoor flash, 8-10 feet seems to be the maximum distance.

To make subject headings and descriptive copy, the teacher can make posters with pre-cut letters and take a flash picture of the poster. Brick walls, flannel boards make excellent backgrounds for poster shooting.

Coordinators can develop promotional series for civic groups, parents, PTA's and faculty groups. DECA activities can be developed into a promotional series. Colored slides are far more interesting and meaningful than black and white.

Suggestions for the use of the slide projector and automatic camera:

A. 20-30 slides produces an effective 30-minute presentation.

B. A script should accompany each series of slides.
C. Several rolles of slides are usually required before the desired pictures are available.
D. When purchasing the Kodak Carousel Projector, the zoom lens and the remote control extension cord are worthwhile investments.
E. After final order has been established, mark each slide on the top end with a magic marker. This will allow for fast realignment should they become mixed.

The development of a slide series is a very fine instructional project for students interested in specific areas. For example, if three girls are interested in fashions, they can decide what slides need be in a fashion series, how and when to take the slides and as a final step, they can organize the slides and write the script.

The projector can be placed almost anywhere in the room and still project a clear forward image. By using a remote control and extension cord, the teacher can stand in front of the group and change slides, point out items on the screen and make the necessary focusing adjustment.

Many Distributive Education coordinators are disappointed with the limited number of available commercial films, visuals that are too general or that make the wrong points, and state film libraries that are out of date. These two projectors can be an answer to their problems. Teachers with imagination can make their own transparencies and slides.

Costs

The cost of making a black and white overhead transparency varies from 8 cents to 36 cents each, depending on the quality and source. Colored transparencies cost a little more. The cost for colored slide film is approximately $2.00 and the processing costs another $2.00; therefore, the cost per slide is approximately 20 cents.

The teacher-coordinator can usually save on these expenses if he is able to purchase through his local school system.

Observations

Why use the Kodak Carousel Projector or the overhead? Because students enjoy them, teachers can easily operate them without wasting class time or losing class control. More instructional material can be covered in less time and teaching methods can be varied. They can easily be adapted to fit different teaching situations and both transparencies and slide trays can be exchanged between coordinators.

As each of our coordinators develops his own personal library, other new and inexperienced coordinators can make copies of the visuals desired.

Two other divisions of Georgia Distributive Education, post secondary and adult, are now using these two projectors enthusiastically. They have discovered that the exchange of visuals between high school and adult or post secondary and adult works to the advantage of all parties.

Any area of instruction in the Distributive Education curriculum lends itself well to presentations by either the overhead or the slide projector. The coordinator does not have to be an artist or an engineer to use these projectors or to develop effective visuals for classroom presentation. Both projectors are extremely simple to operate.

In the summer school classes at the University of Georgia, each new coordinator was exposed to both projectors and they soon became a working part of each students' practice teaching. While these two teaching aids cannot be the answer to every teaching problem, they can make Distributive Education classroom-laboratories more exciting than ever before.

EVALUATION

To insure that we do not slip back into tired and overused media just because it is easier to do so, we need to evaluate our materials and aids--continually, objectively and always with an open mind for the shifting trends in our business world.

SUMMARY

In summary, one of our greatest limitations has been self-imposed lack of vision. We inherited our vocational concepts from other vocational services and from our elders.

We need to remember these things as we discuss the project plan, materials and media.

1. Learning stems from perceptual--that is concrete experience.
2. Subject content, projects and media used to impart information must be suitable to the learner.
3. Creativity is the goal of learning.

EDUCATIONAL MEDIA

Broadcast

Television
Radio

Recorded

Tapes
Records
Videotapes

Projected Materials

16mm motion picture films
8mm motion picture films
   (single concept film loops)
Filmstrips
Sound Filmstrips
Slides
Overhead transparencies
Opaque projection
Microfilm
Stereographs

Display Materials

Pictures, photographs
Maps, globes
Posters
Charts
Diagrams
Bulletin boards
Exhibits, displays
Mock-ups
Models
Dioramas
Objects, specimens
Felt Board
Chalkboard

Programmed Materials

Programmed texts
Programs for teaching machines
Programs for computers
Programs for electronic learning labs

Printed Materials

Books
Paperbacks
Magazines
Programmed texts
Pamphlets

Others

Field Study
Laboratory study
Simulation devices
Instructional kits
Games
Manipulative devices
Dramatization
Demonstrations

SELECTED SOURCES OF INFORMATION

RESOURCE MATERIALS - EDUCATIONAL MEDIA

ALL TYPES NON-PRINT

Educational Media Index. Educational Media Council. New York: McGraw-Hill. Classifies filmstrips, phototapes, flat pictures, phonodiscs, videotapes, slides, transparencies, models, mock-ups, films, kinescopes, charts, maps, programmed materials, cross media kits. 14 volumes by grade levels and subject areas. Last volume is general index.

FILMS, FILMSTRIPS

Educational Film Guide. New York: H.W. Wilson Company, Final supplement published in 1962. Ceased publication.

Filmstrip Guide.. New York: H.W. Wilson Company, Final supplement published in 1952. Ceased publication.

Educators' Guide to Free Films.
Educators' Guide to Free Filmstrips. Randolph, Wis.: Educators Progress Service. Issued annually.

Landers Film Reviews. 4930 Coloseum St., Los Angeles, Calif. Monthly reviews, film evaluations. Subscription $27 per year.

Georgia State Film Library. Registration fee $25 per year: 6 films per week.

University of Georgia Film Library. Film rentals.

U.S. Government Films for Public Educational Use. U.S. Govt. Printing Office, Washington. Catalog $2.75.

Catalogs from producers and distributors of films, filmstrips.

8MM CARTRIDGE FILMS

Source Directory - Educational Single-Concept Films. Technicolor Corp., Box 517, Costa Mesa, California, 3rd Edition, March, 1966. (Free)

Catalogs from producers or distributors: Coronet Instructional Films, McGraw-Hill, National Film Board of Canada, Encyclopedia Britannica Films, International Communications Foundation, etc.

RECORDINGS

Tapes for Teaching. Georgia State Department of Education, Atlanta. Free Service to Georgia schools registered for service.

Educators' Guide to Free Tapes, Scripts, and Transcriptions. Randolph, Wis.: Educators Progress Service. Issued annually. $5.75.

National Tape Recording Catalog. Washington: Dept. Audiovisual Instruction, NEA. Catalog $1.50.

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L. L. Ridgway Enterprises, Inc., P.O. Box 43, Houston, Texas

Robert J. Brady Co., 3227 M Street, Washington

Technifax Corporation, 653 Ethel St., Atlanta

Thermofax-Sales, Inc. Plaster Ave., Atlanta

Tweedy Transparencies, 321 Central Ave., Newark, N. J.

2 x 2 SLIDES

Where to Buy 2" x 2" Slides: A Subject Directory. The Enoch Pratt Free Library, Baltimore (10 cents)

STEREO REELS

Sawyer's, Inc., Progress, Oregon

Tru-Vue Company, Beaverton, Oregon

INSTRUCTIONAL KITS

International Communications Foundation, 870 Monterey Pass Rd., Monterey Park, California (History, geography kits)

United States Steel, Fairfield, Alabama. "How Steel is Made."

Bell Telephone Company. Telephone Kits.

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PERSONAL INTERVIEWS

Miss Juanita R. Skelton, Assistant Professor, Audiovisual Education, College of Education, University of Georgia.

Miss Karen Kay Belding, Research Assistant, Distributive Education, College of Education, University of Georgia.

Miss Janice O. Siler, Graduate Student, Distributive Education, University of Georgia.

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The Utilization of Facilities and Equipment in Distributive Education Project Method Training*

Nearly 100 years have passed since the declaration by President James A. Garfield that he would prefer an outstanding teacher at one end of a log bench and himself at the other end to all the then-existing educational facilities, apparatus, and equipment. Time has not changed the importance of the teacher-learner relationship. Time has, however, changed the importance of physical facilities and equipment. These factors are often given secondary consideration in the organization and planning of distributive education programs, yet their importance cannot be over estimated. The presence or absence of facilities and equipment may strongly influence methods and may even determine content of a D.E. program.

I have been asked to discuss facilities and equipment as they relate to the distributive education project method of training. My recommendations are based on four years of experience in the use of an almost ideal D.E. facility, with two of those years including project method classes. Personal experience indicates that all items to be discussed are practical, realistic, and purposeful in the development of a sound project method instructional program. The mere availability of adequate facilities and equipment does not inherently guarantee improved instruction and, thus, an improved learning situation. The facilities and equipment must be properly utilized in order to improve the educational process. I will, therefore, discuss both facilities and equipment and their use in relation to project method training.

The ideal distributive education physical plant contains a number of basic areas or facilities. There are:

1. Classroom area
2. Model store
3. Workshop-storage area
4. Library
5. Office
6. Exterior display units

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* Prepared by William H. Antrim, D.E. Teacher-Coordinator at Palo Verde High School, Tucson, Arizona, for the 1967 National Seminar in Distributive Teacher Education

These facilities should be thought of as a working whole. However, for discussion purposes, we will deal with each facility individually and the equipment recommended to be utilized with it.

Classroom area: The classroom teaching-learning process has been stimulated and challenged to change by many outside factors during the past decade. The contemporary student is bombarded by the outpourings of various communications media in his daily life. The D.E. instructor must compete for the continued attention and developing interest of this student. To attempt to compete on even terms he must likewise use a varied or multi-media approach in his instruction. Variety of instructional method offers not only a stimulating change for students, but the opportunity for greater insight into varied training methods utilized in the actual business world. Audio-visual materials become increasingly important in transmitting desired skills, understanding, and attitudes to project method students. The business world is literally at the fingertips of today's students when audio-visual materials are adequately employed in DE instruction.

Appropriate audio-visual equipment varies from the traditional to the unique. The record-player, one of the earliest audio-instructional aids, is still an essential item of equipment in classroom learning activities. Single concept films and filmstrips offer new opportunities for individualized skill training and development of specific understandings. The overhead projector, a rarity in classrooms five years ago, has taken over the functions of the chalkboard in vast numbers of classrooms and offers the additional advantage of commercially and teacher-prepared transparencies for use in all areas of the D.E. curriculum. A 35mm camera and slide projector should be in the audio-visual equipment of the project method program. Improvements in cameras and equipment permit students as well as instructors to prepare visual materials from personal observations in the business community. Such materials, developed through directed projects, can develop knowledge and understandings of the highest order in participating students. They can later be utilized by other students with similar career interests. 35mm slides offer the important advantage of visually transferring the actual business environment into the classroom. A rear projection screen used in conjunction with the slide projector offers an entirely new dimension to the instructional program. Simultaneous illumination of both slides and classroom is possible with the rear projection screen. This permits the active participation of students during visual presentations such as observation-discussion of human relations problems or sequential learning or merchandise mathematics through prepared slide series. Visual case problems can thus be developed in many instructional areas for observation and discussion by students.

Basic classroom equipment should include many of the traditional items, such as adequate chalkboards and tackboards. Separate tables and chairs should be standard equipment in most D.E. classrooms, as they allow versatility in use from small to large group instruction and are conducive to a conference-type atmosphere. Trapazoidal tables are ideally suited to this use.

Independent and, hopefully, individualized study is encouraged when individualized learning facilities are incorporated into the physical plant. A number of portable study carrels are recommended for use in the perimeter area of the classroom. These are available with electrical connections that will permit individual use of audio-visual equipment such as tape recorders, single concept projectors, and cartridge-loading filmstrip previewers. All of this previously-named equipment is suiable for individual listening and/or viewing.

In conclusion regarding classroom equipment, I should like to make a prediction for the future. Television, although not presently an essential part of classroom equipment, will within 5 years become as important a part of D.E. classroom instruction as the overhead projector is in so many classrooms today. Video-tape recorders offer opportunities for personal interviews with celebrated individuals, roleplaying and sales demonstrations by students, lectures reinforced with abundant visual materials from the business world, preparation of television commercials by students, and many other uses. Student participative activities have new meaning when they are able to observe and evaluate their own actions through tape play-back. Our experiments with classroom use of television have shown a high rate of interest and motivation by students. When some of the present technical problems have been overcome, and costs reduced through quantity production, self-contained classroom video-tape units will become an important part of the instructional process.

Model Store: The model store takes on new significance in the D.E. project method instructional program. It can readily become the primary project method teaching tool. This is by no means an automatic process. There must be conscious effort on the part of the D.E. instructional staff to adapt and develop model store facilities into the vital teaching role that they can assume.

Specially designed equipment for model stores is now available from several manufacturers. This equipment includes a large assortment of merchandising units and is ideally suited to the varied occupational training needs of project method students. The basic units can be altered to accommdiate virtually any line of merchandise. Many of the fixtures are shallow in construction, which facilitates stocking of the model store in breadth rather than depth, in addition to requiring, a minimum of floor space. Adequate numbers and sufficient variety of units should be included in the model store. This will help to assure that all students have an opportunity to participate through individualized as well as group projects. A cash register and cashwrap table are necessary parts of the model store if the facility is to be utilized for ongoing merchandising projects throughout the school year. Shadow boxes are a useful addition for overall student training, and can serve double duty as merchandise units. Although not necessities, they are helpful in permitting more extensive training in visual merchandising. They develop an aura of realism that is helpful for student motivation in model store project activity.

It is essential that all elements of the model store be integrated into a realistic working unit in such a manner that they closely approximate a real-life merchandising situation. Model stores have often been used for only limited training in salesmanship and display and have not been developed to their highest potential for training in other areas of the D.E. curriculum. All too often they have been unused for major portions of the school year, sitting idle due to lack of merchandise, display materials, or an organized plan for their use. Continued utilization of the model store is greatly dependent on an adequate supply of merchandise to stock it. This need not be actual merchandise in all cases, but can include "dummy" cartons and containers sealed and weighted to simulate actual products. The weighting of dummy cartons adds a touch of realism that is helpful in developing student interest and motivation in the use of the model store facilities. Since many manufacturers are willing to supply empty containers, the model store can be "stocked" with merchandise relating to the varied career interests of the project method students. The students may assume this responsibility. This individual project would familiarize them with manufacturers, channels of distribution, and much additional information related to their specific career interests. Requests for quantities of some cartons will permit "stocking" of these items in depth which will facilitate development of realistic merchandising projects in the model store. Surprisingly, many manufacturers approached for cartons and containers only, will offer to supply actual merchandise; thus enhancing the realism of the model store simulations. Such permanent stocking of the model store relieves the instructor of complete dependence on local sources of merchandise; however, these should continue to be used both for the value of varied merchandise displays as well as the public relations benefits inherent in such cooperative effort with local firms. A model store stocked in the manner related previously, with some depth of stock as well as breadth of offerings, permits development of many simulated business projects of a group or individualized nature. Projects related to instructional areas of salesmanship, display, advertising, operations, receiving and marking, stockkeeping, and merchandising can be developed to closely parallel actual marketing and merchandising operations. Highly structured projects with built-in situations and problems can simulate the real-life situations and problems that exist in specific marketing and merchandising activities.

The model store may ideally be organized as a departmentalized general merchandise store. With this organization its facilities can be related to the merchandising interests of the great majority of students. Merchandise can be priced, season-coded, and identified by department in order that simulated projects can be structured with authenticity. The cash register should be keyed to the various departments. It can thus become an integral part of the model store with projects ranging from simple change-making to financial control of the merchandising process developed to simulate actual business conditions. The range of possible projects is limited only by the available time and imagination of the D.E. instructor.

Let us emphasize again that facilities do not, of themselves, offer varied learning experiences to the students. They must be organized, developed, and used by the instructional staff in such a manner that they will offer students the highly realistic and meaningful experiences that are the objective of project method classroom activities.

Workshop-storage area: If the project method is to take full advantage of student participative activities, provision should be made in the D.E. laboratory for a workshop-storage area separated from the main classroom and model store areas. The 50 to 60 minute length of classes in the average high school is not suited to the continuation of extended projects that may require a number of hours of classroom time for completion. The workshop-storage area permits room for storage of project materials from day to day as well as designating the space where projects requiring some disorder may be accomplished without subjecting other classes to an untidy classroom atmosphere. Materials for construction of displays can be utilized in this area, and provision should be made for storage of larger display props. A sink should be provided to permit adequate display preparation and cleanup. Several waist-high worktables with understorage should be included. They would be for use in display and advertising project work. These worktables can also be used for simulated projects in receiving, checking, and marking. A small showcard printer should be included in the workshop. Students can develop greater realism in model store merchandising projects if their units are properly signed. At least one adjustable advertising layout board should be provided in the workshop area for layout and pasteup of ads. It should be the goal of the instructors in the planning and use of workshop materials to copy the actual working environment as closely as possible. Projects then take on truer meaning for students. In subsequent directed observations in the business community, they are able to identify their classroom environment observed in the actual business world.

The workshop area should provide adequate storage area for surplus merchandise not displayed in the model store. It is possible to accumulate a considerable quantity of actual and "dummy" merchandise in the process of seeking to meet the specific needs of all students. The workshop-storage area thus fills a multitude of needs in the project-oriented classroom.

Library: The individualized nature of distributive education training calls for abundant resource materials related to the specific vocational interests of students. Provision should be made for an orderly and accessible accumulation of such materials. A separate distributive education library is recommended adjacent to the main classroom area. Adequate shelving should be included to permit classification and storage of trade journals and other publications for a number of years. Access should be provided from outside as well as through the classroom. The library can then be used by students who wish to continue study and research during out-of-class periods. A long table and chairs should be provided in the library to permit small groups or committees to meet outside of the classroom at times when it is being used by other classes. The library should also include file cabinets for student use in order that they have readily available storage space for their project materials and other information such as DECA chapter operations. If space permits, several portable study carrels could be incorporated into the library to permit out-of-class use of audio-visual materials.

Office: The personalized nature of the project method requires frequent student-instructor conferences. Separate and sound proof office space should be a part of the total D.E. facility. Adequate file cabinets for program operation should be provided. A telephone, tackboard, bookcases, desks, and chairs should be provided, as necessary. The office should be planned with space provisions for additions to the D.E. instructional staff that may occur as the D.E. program develops and increases in size.

Exterior display units: Exterior display windows are not a necessity in the D.E. project method program, but can serve two important purposes that make their inclusion worthwhile. They offer students the opportunity for more varied display projects than are possible in the model store. A variety of window sizes should be offered. Ideally, one floor-to-ceiling window and several shadow box windows should be included. They should be constructed with rear doors or removable backs so that they may be used as either open or closed front display windows. Closet space should be provided in close proximity to the windows to allow storage of an adequate assortment of display fixtures, props, mannequins, and forms. A second important use of exterior display windows is the promotional value to the total D.E. program. Their mere existence publicizes distributive education. They can be utilized throughout the year for promotional campaigns geared to interest and inform students about distributive education.

A fundamental question will arise as to how all of the suggested facilities and equipment can be incorporated into the standard D.E. classroom. The obvious answer is that they cannot. Art classes, machine shops, chemistry and biology labs require outsized classrooms to provide adequate space for their materials and equipment. So also does the completely equipped project-oriented distributive education facility require additional space for the laboratory equipment so necessary in its successful operation. Personal experience has proved that an area 28 feet by 75 feet has not been too large when student involvement in classroom projects is at a high level. Distributive educators must "think big" if they are to meet the challenge of a dynamic, expanding educational program.

PRIORITY LIST FOR
DISTRIBUTIVE EDUCATION FACILITIES & EQUIPMENT

	Must Have	Should Have	Nice to Have
Classroom	Trapezoid or Rectangular tables Armless Chairs Chalkboard Tackboard Overhead Projector Movie Projector Filmstrip Projector Slide Projector Tape Recorder Projection Screen Record Player	Opaque Projector Study Carrels Rear Projection Screen 35mm Camera Flannelboard	Single-concept Projector Cartridge-loading Filmstrip Previewer Programmed Teaching Machines Video-tape Recorder
Model Store	Merchandise Units Cashwrap Unit Cash Register Actual or "Dummy" Merchandise	Shadowboxes Display Forms Signholders Pegboards	Fitting Mirror
Workshop-Storage	Shelving Worktables	Wash Basin Showcard Printer Ad Layout Table	Tool Cabinet
Office	Desks & Chairs File Cabinets Telephone	Bookcases Typewriter Typing Desk	
Library	Shelving	Table & Chairs File Cabinet	Study Carrels
Exterior Display Units	- - - -	Mannequins Display Forms Display Props Portable Lights Sign Holders	Turntables Drapes

SECTION III

IMPLEMENTING THE PROJECT PLAN THROUGH TEACHER EDUCATION

A Philosophy of Teacher Education: Teaching, Research, or Service? *

Teacher education--what is it? It is a simple question, but one which is not easily answered in the complicated maelstrom of types of educational institutions which see as their role the improvement of public and private education. And, even within a given institution, there may be vast differences in the perceptions of what constitutes teacher education for a given discipline. At this national seminar, the professionals in Distributive Teacher Education have the opportunity and the responsibility to come to grips with the question, "What is Distributive Teacher Education and what ought it to be?"

DIVERSITY IN HIGHER EDUCATION

The scene of American higher education is one of great diversity. It is quite obvious that institutions differ greatly in the scope of programs, source of funding and control, admissions policies, range of services, and other programming factors. This paper does not describe this diversity; it accepts it as a fact. What the paper is intended to be is a personal point of view about what distributive teacher education might be in a given institution. Primarily the paper calls attention to a possible range of contributions which a distributive teacher education faculty might make. There is in this paper no attempt to thresh out questions such as "which college should administer the teacher education program" or "what should the course work in the program be." Rather, the paper is one of asking some fundamental questions about the role of distributive teacher education and suggesting that each institution must arrive at its own matrix of programming.

A PHILOSOPHICAL BASE

The question of what a given distributive teacher education program ought to be seems simple enough, but there are many major questions to be answered. What other teacher education programs are in the institution is not necessarily what distributive education ought to be. There is reason for us to look at a host of factors which influence our professional development--factors which may not face the teacher educator of social studies, elementary education, or any one of a dozen instructional specializations, factors which vary with each state school system and development of state control, factors which vary with the type of teacher education institution--its size, self-image, its range of influence, and its scope of operations.

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* Prepared by Dr. Peter G. Haines, Director of the Research and Development Program in Vocational-Technical Education, Chairman of Business and Distributive Teacher Education, Michigan State University, for the 1967 National Seminar in Distributive Teacher Education

Development of a distributive teacher education program rests at all times upon what may be described as a philosophical base. The institution, its administrators, and its teacher education personnel always have some sort of picture of where they are going. They have an image of what it is they are to contribute to the betterment of education. They have a set of perceptions of their role and they hopefully have a set of objectives on which they base their actions. Thus, each institution has a philosophical base--a position which is composed of a rational set of goals and operational principles to which they subscribe.

Distributive teacher education always operates within this institutional philosophy--the distributive teacher education program either is in harmony with this position or to some degree it is in opposition.

THE TRIUMVERATE TEACHER EDUCATION FUNCTIONS

If one were to categorize the functions which a teacher education program could assume, three major areas would be delineated. In the tradition of the land-grand institution, these would be simply described as teaching, research, and service. Any institution could define its role as consisting of any one or any combination of these three functions with any degree of emphasis upon each function. But, it is the position of this paper that a viable teacher education program must include emphasis upon all three functions. To fail to emphasize any one is to have a lopsided teacher education program. If this position is acceptable, the question becomes not one of function but one of emphasis as to which function is to receive emphasis at which time.

Teaching

No one would deny that teaching is the primary role of the teacher education institution. But, there is a need to define what is meant by teaching--is it a class in a room on the campus with credits assigned? Or is teaching something more than this? My view is that teaching is multi-dimensioned if improvement of instruction in the classroom of the public schools is seen as the primary end result.

The distributive teacher education program must rest first on the function of teaching. It is essential that staff be employed who enjoy teaching and who wish to improve it. Certainly a regular program of courses must be offered on the campus at the undergraduate and graduate levels as the institutional goals prescribe. If these are regular courses designed to meet regular needs, they should be offered by the institution without outside funding reimbursement. There is no more need or reason to reimburse from outside funds a course in "Methods in DE" than there is to seek funding for courses such as "Teaching Children's Literature" or "Methods of Teaching Music." The institution must expect to train vocational teachers on the campus as it does any other kind of teacher.

Every institution should consider carefully the need for establishing a regular series of credit courses off-campus which have the quality demanded on the campus. These courses become part of the way of upgrading the quality of public school instruction. Yet, the off-campus course poses a special problem--one of potentially low enrollments if the needs of teachers are to be met at the time when they need aid. A solution is proposed. The state department ought to be willing to underwrite whatever losses are incurred in off-campus instruction if the course is one which the state and teacher education institution agree is necessary even though enrollments are low.

At this point, let me suggest some other emphases upon teaching which the DE teacher education institution ought to consider. If we are to educate teachers properly, we must have independent study courses which meet individual needs. We must consider the need to offer courses in technical content which the other colleges or departments are unwilling to offer. We must consider as "instruction" the time the teacher educator spends with graduate students who assist him on projects. If they are learning, it is instruction even though not formalized by the appelation of the term "credit course."

Little more needs to be said about the necessity of the teaching function for the teacher educator--its primacy is quite evident.

Research

In higher education the name of research is high on the list of expectations for faculty. Yet, all too often the function of research is often glorified but not supported by the assignment of resources. It is the position of the writer that no distributive teacher education program is complete or even adequate unless research is a constantly supported function of the program. But this premise can be acceptable only if the term, research, is given some definition.

There are three basic forms of research activity in which the distributive teacher educator might engage. Simply put, they are:

1. Formal research which involves the usual forms of formalized investigation based upon a careful design. These include historical studies, normative studies, and experimental studies, including the many sub-categories of each.

2. Curriculum development research which sometimes is described as action research. This category takes the form of controlled development, try-out, and evaluation of curriculum patterns, instructional methods, and instructional materials and involves the personnel of local schools as research associates.

3. Controlled writing which is the formalized search for knowledge and the subsequent publishing of written materials for use by other professionals or those in the administration and instructional phases of the public school classroom.

It is the position of the writer that one or more of the forms of research described above must be the part of the distributive teacher education program. If new knowledge is not generated, then the teacher education program neither contributes to the profession nor enhances its own instructional and service program. If research is not undertaken, then the program must depend entirely upon the efforts of others to provide new knowledge.

A word of caution is due here. There is no need for every institution to engage in formal research nor seek out large research grants. Nor is there a need to presume that every professor is capable of undertaking formal research. Nor is there the assumption that research must be a large part of every teacher education program. But, there is need to be sure that the institutional administrator sees the research function as an integral part of the teacher education progran and subsequently recognizes the need to devote a portion of the budget resources to it.

Service

Almost every institution of higher education and a large majority of teacher education faculties perceive teaching and research as major and desirable functions. But, the service function is in many cases largely by-passed except as faculty provide this through private, contractual consulting.

The service function is imperative in vocational teacher education. If there is truly a program of teacher education rather than a set of courses or research projects, then the needs of schools and teacher demand the provision of services. But, what services? Services may perhaps be categorized somewhat as follows:

1. Services to schools. such as consulting regarding the quality of the present instructional program, or evaluation of needs for future development.

2. Services to teachers including program visitation, advice regarding certification, upgrading and advancement through conferences and in-service meetings, and consultation regarding specific local problems.

3. Services to the profession through service on committees of educational agencies and organizations, speaking to professional groups, and assisting with organization of professional meetings.

4. Development of instructional materials for distribution and use by the schools.

5. Recruitment of able people into the teaching profession.

The list of services by the teacher education program might be endless but the position is clear. The service function of vocational teacher education is a clear-cut responsibility of the institutión if education is to be upgraded. Resources must be allocated to the service function.

A QUESTION OF VALUES

The provision of a complete program of teacher education program boils down to a question of values. The teacher education faculty must be convinced of the need for adequate emphasis upon each of the three teacher education functions. The administration must be equally convineed. And the public schools must come to expect such services--they must demand it because they value it.

Let me at this point suggest some additional questions or considerations for those who administer and operate distributive teacher education programs.

1. Have we placed enough emphasis upon participating experiences in our teacher education classrooms? I suggest as a generalization that we have used far too large a portion of time in the professional courses for teaching principles and philosophy and organization and administration. Too little emphasis has been placed on teaching teachers to plan instruction, to develop outcomes, to make decisions about the teaching act, and to use appropriate methods and materials. Far too many of us are guilty of lecturing too long rather than asking our students to participate.

2. Have we convinced ourselves and our administrators of the need for a balanced teacher education program? Do we provide resources for teaching, research, and service or do the latter two functions receive attention only after the first is taken care of? I wonder if what should go on in the field and away from the campus is not seen as something less desirable than that which occurs on the campus?

3. Are we ready in teacher education to assume out of regular budgets the teaching of on-campus professional courses for DE trainees? There is no reason for requesting outside funds for teaching regular courses any more than the institution demands funds for other teacher education courses. But, there is a strong reason for vocational teacher educators to request heavy support from state departments to carry on those functions of research and service for which legislators do not supply funds to the institution.

4. Are we involving in-service teachers in sufficient experiences which involve investigation and creativity? Or, to put it another way, do we often behave as if only coming back to the campus can upgrade and advance the teacher's skills? Are we building leadership by working closely with local school personnel?

5. Are we in distributive teacher education exercising the autonomy which the professor must have in programming his time and resources? At the same time are we fully aware of our special responsibility to plan cooperatively with our colleagues in the state department of education so that their actions and ours meld into a total program which meets our state needs? We must recognize at all times that agencies and groups have the right to seek to purchase our resources to meet needs as they see them. But, we must consistently reject the purchase of our services if we do not fully agree with the purpose of the contract, and if it does not contribute to the goals we pursue in the institution.

SUMMARY

This paper is intended only as a personal viewpoint about what a distributive teacher education program ought to be. The major point made is that a total program of teacher education activities needs to be planned and undertaken--a program which involves a combination of teaching, research, and service activities. A teacher education program is not a program unless it is viewed as a totality by the faculty and their administration. While the size of the institution, its image and role, its service area, and its scope of operation will influence the teacher education programs within it, we must be sure that in DE we fight for the type of vocational teacher education program we must have and we must reject attempts to mold our programs into those patterns presumed to be valid for elementary or secondary education teacher education fields.

Distributive Teacher Education: Its Role in Program Development*

My assignment today is to provide the participants of this National Seminar on Distributive Teacher Education with a very brief history of our profession as teacher educators. The purpose of doing this is to place the seminar in its historical context and to provide some perspective for deliberations during the remaining part of the week. Thus it seems to me that the oft-quoted aphorism, The Past Is Prologue, is appropriate to the situation.

Although the task of preparing this paper seemed simple at first, it soon became apparent that it was not only formidable but risky because of the probabilities of inaccuracies in the literature and in my recollections. I also realized that I was running the risk of being labeled an "old timer." If this happens, I hope that the impression of having a perspective to select intelligently from the many educational innovations, those that have potential for the sound growth and development of D.E., will accompany it. I hope that those of you who detect errors will be tolerant of my situation and will inform me about them. I assure you that this information will be appreciated and graciously accepted.

In approaching this topic, I examined several ways to organize the material and finally decided that the most feasible and interesting procedure would be to communicate it to you by decades, starting with the period 1910 to 1920, then the 1920's, the thirties, the forties, fifties and sixties.

1910-1920

The first distributive teacher education was self-education beginning in the last quarter of the 19th. century. It was company training carried on by progressive distributors such as the National Cash Register Company and the Wanamaker Department Store.

ORIGIN OF THE SCHOOLS OF RETAILING

"In 1911 Mrs. Lucinda Prince established the first school, not only to train educational directors for stores, but also to train high-school teachers to give instruction in store-training courses." This statement was quoted from U.S. Office of Education Vocational Division Bulletin No. 205 (1939), a historical document which a number of you will remember. Nearly everyone will recall that Mrs. Prince is the same great leader who started distributive education with a class of eight girls in Boston, as a private venture under the guidance of the Womens' Educational and Industrial Union until 1918, when, sponsored by the National Retail Dry Goods Association and a committee of merchants, it was reorganized as an independent enterprise under the name of Prince School of Store Service Education. In 1922 it became one of the professional schools of Simmons College in Boston.

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*Prepared by Warren G. Meyer, Teacher Educator for Distributive Education, University of Minnesota.

The next school of retailing to be established was the Research Bureau for Retail Training, which was started at Carnegie Institute of Technology in 1918 by W. W. Charters. It was later transferred to the University of Pittsburgh. In 1919 Norris A. Brisco started New York University School of Retailing, an institution which soon made important contributions to the education of teachers of distribution.

EARLY ASSISTANCE FROM THE U.S. OFFICE OF EDUCATION

In 1918 Mrs. Prince prepared a bulletin on retail training for the U.S. Office of Education. The next year Isabel Craig Bacon was appointed to the Office of Education as special agent on retail training. Both actions were harbingers of the important role of the U.S. Office of Education in distributive teacher education during the next half century.

SUMMARY OF THE FIRST DECADE

In summary, the decade from 1910 to 1920 provided the establishment of distributive teacher education. It also provided the establishment of teacher training activities, as they were then called, in the U.S. Office of Education and in collegiate schools of retailing.

THE 1920'S

Very little information about distributive teacher education was located for the second decade. Apparently during this period collegiate schools of retailing became the recognized source of preparation for teachers of retailing and selling. Teachers with undergraduate degrees in other fields attended these schools to learn retailing and earn credits for certification or a master's degree in retailing.

THE 1930'S

PREPARATION OF TEACHERS DURING THE THIRTIES

During the school year 1932-33 Glenn Oscar Emick gathered information about "Cooperative Training in Retail Selling in the Public Secondary Schools." This research was a thorough nation-wide survey done at the

School of Education, Indiana University under the direction of Melvin S. Lewis, Professor of Vocational Education. Through this study, which was published by the U.S. Office of Education as Bulletin No. 186 (1936) we gain some insight into the nature of distributive education in the 1920's and early thirties.

Approximately 112 teachers and administrators of retailing were named by superintendents of schools; the list was refined to 94 names. Information was gathered from 62 individuals (17 men and 45 women). Note the ratio as compared to today. Two received undergraduate training in schools of retailing; graduate work was done in schools of retailing by more than half of them, while 27 of them did graduate work in non-professional schools.

The distribution among the various colleges was as follows:

Prince School of Store Service	23
New York University School of Retailing	7
Research Bureau for Retail Training	3
School of Education, Univ. of Cincinnati	2

Courses in textiles, economics, merchandising, salesmanship, psychology, advertising, color and design, educational methods and practice teaching, and marketing were the special courses listed by the teachers as being especially helpful in teaching retailing.

Teaching Experience. Eighty percent of the teachers reporting had high school teaching experience. The average length of experience in teaching merchandising and retail selling was nearly five years. Eighty percent of the teachers indicated that they had taught in night school, store classes, and so forth.

Business Experience. The backgrounds of business experience of these teachers is interesting: They had held 87 department store positions, 17 specialty store positions, three chain store positions, one medical supply house salesman position, two provision store jobs, and 23 miscellaneous positions in distributive and office work, also two in government work. The report points out that the students who attended a professional school were certain to secure experience in selling and executive positions. More than forty percent of the teachers listed business positions held since becoming teachers of merchandising and retail selling.

Annual Salaries. Average annual salaries of teachers of merchandising and retail selling were higher than those of other vocational subject teachers and other high school teachers. The average salary was $2,568.

In summary, the distributive teacher of 1931-32 compares favorably with today's D.E. teacher on matters of technical course work in distribution, in type of occupational experience, in experience in teaching distributive subjects, and in comparative salary.

DESCRIPTION OF A PROTOTYPE OF THE LATE 1930'S

In a sense, I myself am a prototype of the teacher just described. Please permit me to relate my own preparation for distributive education. With a B.A. degree in economics, a M.S. degree in retailing in a cooperative program, two and a half years of merchandising experience in large department stores of New York and Chicago, and two and a half years of merchandising experience in a large mail-order chain (Sears), I returned to the University of Wisconsin for additional study in personnel work in the spring of 1937 -- managerial trainees were a dime a dozen. Since personnel management was not a specialty at the University, I took courses in education and economics, among them a course in guidance. There were no distributive education courses to take. As a result of a manipulation on the part of the guidance professor, I found myself in the fall of 1937 with a teaching contract at West Allis (Wisconsin) Vocational and Adult School rather than returning to Sears in Milwaukee, the reason being that $1400 per year for nine months is considerably better than $23.00 per week for being a division head of a boys clothing department.

I recall asking Mr. Harry Belman, the director of the school, what I should teach them. His answer was, "Brother, that's your problem." Frankly, that first week of teaching is a blank spot in my memory. Teaching that class of general continuation students anything about retailing would be a challenge to an experienced teacher. I reflect on that experience each spring when the members of our senior class graduate. The attrition rate among teachers was high in the 1930's. Generally speaking, those of us who survived were competent in our content field, but not necessarily well balanced in this respect.

Facilities and Materials. Text materials were scarce. In our day-school class we used a watered down college textbook which was about as far removed from the interests and problems of the students as it could be. We used as many trade magazines and other publications as we could "beg, borrow or steal." I recall scrounging for used store equipment, which was rejuvinated and served our purpose fairly well. I used an orange crate for a filing cabinet, which was sufficient to warrant the school's buying a cabinet. Mail order catalogs became excellent source material for almost any merchandising problem.

We used role playing without knowing what the word meant. I can recall recording sales presentations on a wax platter and later on wire. We analyzed playbacks of sales demonstrations at least as well as they are being analyzed today because personal selling had a greater meaning in those days.

Adult Teaching as Self Teacher Education. Let me relate a final experience in an evening school class. In this particular situation, I realized that I was being heckled by a smart aleck, and I didn't know what to do about it. (Recall that I had not enjoyed the benefit of distributive teacher education.) Not knowing what to do, I did nothing, which proved to be the right thing to do because the class members soon put the heckler in his place.

TEACHERS LEARN BY DOING TOO, AND BY EXCHANGING IDEAS

I have not told you my experiences as a beginning teacher merely to amuse you -- actually I have left out the humorous incidents. Rather, I have been trying to demonstrate that what we are going to do here at Kellogg Center by way of teacher education on the project training plan really is not new. The students in my day school class were not placed on jobs until the Christmas rush season began, and if they were lucky they continued working after the holidays. We used projects of a type. The basis of the curriculum was my own experience in department and chain stores. Concurrently, I added some ideas I learned from teaching my adult class in service station operation.

Our empirical development taught us many things such as: A teacher must know his content field well and study it continuously. Business experience on the part of teachers provides many clues to curriculum development if the teacher can identify them. Concurrent teaching of adult classes in marketing and merchandising provides excellent resource material for secondary school instruction. It also provides clues to teaching methods that help bridge the gap between the adolescent and adult environment. (High school students like to be treated as adults.) There are many excellent teaching materials and resources around us all the time if we recognize them. Incidentally, I got my material for textile swatches for nothing from a rag company; it was much easier than trying to find them in local stores. Finally, methods govern content as much as does the curriculum, if properly selected and administered; much of our content has come to us as the result of studying conference leading reports of adult classes. One more point, we learned from our colleagues. The home economics teacher and I used to "swap" in teaching certain units of instruction -- there were things about feminine hygiene my girls needed to know that I wasn't in a position to teach them, and the home economics students seemed to enjoy what I had to say about selling.

THE GEORGE-DEEN ACT AND DISTRIBUTIVE EDUCATION

The George-Deen Act of 1936 was a kind of declaration of independence for distributive education. However, the funds that were earmarked for D.E. did not provide immediate emancipation, as one who did not experience the influence of other vocational services might expect. In many states, trade and industrial education was dominant, and its administrators generously shared its know-how. My first professional vocational education was received at Stout Institute from the trade and industrial teacher trainer. I took a course in occupational analysis and a course in conference leading. Later, during the summer of 1938, I believe, I took a course in distributive education from the late Roy Fairbrother, who I succeeded an itinerant instructor when he was appointed to the position of state supervisor in 1938. The institutional distributive teacher education existing at that time was done by the state supervisor. Returning to the subject of influence from other vocational fields, it appeared to many distributive educators that the association with other vocational fields was both an asset and a liability. May I illustrate the later from the point of view of a somewhat egotistical and stubborn young man?

My early years as assistant state supervisor in Kansas were served under a very fine, but paternal, supervisor of trade and industrial education. This wonderful man, out of the goodness of his heart, bestowed the heritage of his field upon me and my work. To him, the principles of vocational instruction should have been applied in exactly the same manner in all situations. It was very difficult for him to understand that in many situations distributive occupations workers just would not sit still long enough to work things out through the conference method. I vividly recall sitting at my desk for an entire week so irritated over a difference regarding pedagogical procedures that I could not work. I have often thought that the Almighty must have been close at hand during that week because my supervisor never realized my plight. Less than a year later I was emancipated by being made a state supervisor in my own right. I do not wish to leave you with the impression I regret my associations with trade and industrial education. I prize them highly and have found them very helpful in planning combination programs of vocational education in recent years. Though we may not realize it, much of our vocational philosophy and some of our pedagogy has come to us through trade and industrial and other vocational fields.

Some of you will recall that subsequently a somewhat similar issue of dominance or relationship arose through a dispute among staff members in the U.S. Office of Education in regard to business education. At that time, distributive education in the U.S. Office of Education was a part of the Business Education Service as it always had been. The differences in viewpoints were carried to state departments of education in some situations and even entered into teacher education administrative considerations. The end result of the dispute was the creation of the Distributive Education Service in the Office of Education. Unfortunately, there was emotional involvement before the issue was settled. Therefore, instead of strengthening relationships among vocational services, there was an opposite effect in some quarters.

RICHMOND PROFESSIONAL INSTITUTE

From the viewpoint of institutional distributive teacher education, 1937 was a banner year because it produced the collegiate teacher education program at Richmond Professional Institute under the direction of Miss Louise Bernard. Associated with Miss Bernard was Dr. Natalie Kneeland who made many contributions to the literature of our field. The initial program was the first full-time program in distributive teacher education.

SECONDARY SCHOOL TEXTBOOKS

The 1930's will be remembered as the most productive decade in the production of secondary school textbooks. South-Western Publishing Company produced two editions of its retailing book -- the first in 1931 and the second in 1938. In 1932, Prentice-Hall published a textbook on store salesmanship. In 1936, the Ronald Press published a book on the elements of retailing by Dr. Paul Nystrom who had been very influential in the passage of the George-Deem Act. In 1938, the Gregg Publishing Company published the first edition of its book on retailing principles by G. Henry Richert, who shortly thereafter became a regional agent for distributive education in the U.S. Office of Education assigned to the Central Region. Also in 1938 Ginn and Company published a secondary school merchandising textbook. The last book of the decade was a book on retail salesmanship published by the American Technical Society.

THE FIRST NATIONAL CONFERENCE -- DUNWOODY INSTITUTE

In August of 1939 the U.S. Office of Education sponsored the First National Conference for Distributive Education which was held at the William Hood Dunwoody Institute in Minneapolis, Minnesota. Approximately 35 conferees were divided into four committees: (1) Organization and Development, (2) Teacher Training, (3) Instructional Materials, and (4) Methods. Thus, three of the four committees dealt with problems of teacher education. Three of the original group of conferees are still active in distributive education. They are Mr. T. Carl Brown, State Supervisor of D.E. in North Carolina and the present Vice President of the American Vocational Association; Mr. Lawrence Thompson, Chief of Distributive and Office Education in the Michigan State Department; and Mr. G. Henry Richert, who has retired from the U.S. Office of Education but is still active in distributive education and a resource person for this seminar. The chairman of the committee on Methods was Mr. Donovan Armstrong, of the U.S.O.E. who is associated with another aspect of vocational education.

The committee reports are so interesting that we could spend the rest of the day discussing them. For example, a great deal of time was spent by the Teacher Training Committee trying to select a word that would be descriptive of the position of the person doing the teaching, and in defining his duties.

> The group in considering this problem realized that this composite, which we call a Discussion Leader, would very in degrees from the teacher to the conference leader, depending upon the circumstances found in any particular class situation. The group felt, however, that in teacher training our efforts should be pointed at the composite individual rather than attempting to train a 100% formal teacher or a pure conference leader. The thinking of the group seemed to follow the idea that the job we are charged with doing is somewhat unique and has many features which are not found in other aspects of education; therefore, it might be necessary to erect some structures peculiar to Distributive Education, rather than simply adopting practices from other areas of Vocational Education or from the field of academic school experience.

The report of the committee on methods includes a brief account of the "research project method," which seems to have much in common with the project plan that is the focus of this seminar.

SUMMARY OF THE 1930'S

In summary, the 1930's were venturesome years, distributive education survived the great depression and gained much ground. More secondary school textbooks were published during that decade than any decade thereafter. The George-Deen Act was passed with earmarked funds for distributive education for the first time. Distributive education declared its independence but did not achieve it immediately. Finally, the first modern institutional program aimed at public school teaching of distribution was started.

THE 1940'S

Up to World War II, the 1940's were an extension of the 1930's. Then conditions changed suddenly. Enrollments in the adult programs dropped severely; the cooperative part-time program reached a plateau. Distributive occupations were not considered essential to the war effort, and women and older men took over. Most men coordinators joined the armed services, and the women had their heyday.

THE PACKAGED COURSES

Teacher education for the adult program took a sudden turn toward the packaged courses. These were cook-book courses in which nearly every move was prescribed for the instructor. Committees of distributive educators and state supervisors worked with store training directors in transposing the Training Within Industry (TWI) courses to a distributive occupations setting. Job Instruction Training (JIT), Human Relations Training (HRT), and Job Management Training (JMT) were converted from a trade and industrial setting to our field. These courses provided D.E. with its first organized attempt at supervisory training. The cook-book packaged courses sound ludicrous today, but they served their purpose quickly and efficiently. The content was excellent. It deserves reexamination as a resource for present day curriculums. In some respects it reminds me of programmed instruction, except that it taught to groups.

THE VICTORY PROGRAM

During the early war years state supervisors were busily engaged in the construction of Victory Program Courses. These were specially designed courses which dealt with the problems of merchandising during the war emergency. Content dealt with such things as rationing, merchandise shortages, hoarding, the black market, ersatz merchandise and substitute selling. Distributive education also cooperated with the Office of Price Administration (OPA) and other government agencies in informing merchants of the many new regulations. Sometimes a thousand or more merchants would be brought together in a large high school auditorium to disseminate information about the war effort and receive instructions. Maintaining morale among civilians through intelligent treatment at the point of sale was of deep concern to government and merchants alike. We can be proud of our contribution to the war effort.

THE POST-WAR PERIOD

One of the most significant developments following the war was the organization of the Distributive Education Clubs of America. If I am not mistaken, the club program at that time was thought of primarily as an opportunity for D.E. students to participate in an extra-curricular activity that was a substitute for the regular extra-curricular activities carried on during work hours. It did not become an integral part of the curriculum until later.

Soon after the war a number of colleges and universities started full-time distributive teacher education, among them Kansas State Teachers College, Emporia, 1945; State College of New York at Albany, 1946; the University of Minnesota, 1946; Western Michigan, 1947; Ohio State University, 1948; Michigan State University, the same year; and the University of North Dakota in 1949. During the early years of these teacher education programs the teacher educator taught marketing and other content courses as well as professional courses.

We made educated guesses at the curriculum and still do to a large measure, but so do many of our colleagues. Classes were large because of the G.I. enrollment. We dealt with one of the finest groups of men possible. Most of them knew what they wanted in life becuase they had had plenty of time to think about it. A large percentage of our present state supervisors and teacher educators stem from this group.

The closing years of the 1940's were happy years; Federal funds were increasing, and so were enrollments. In 1948 the U.S. Office of Education held the second National Conference. Teacher education received more attention than at any time during the decade.

In summary, the 1940's were characterized by the packaged courses, the Victory Program, the organization of DECA, the establishment of a number of full-time institutional teacher education programs, the return of the G.I.'s, and increasing federal funds and enrollments.

THE 1950'S

During the early 1950's our good luck ran out. In successive years Congress cut earmarked funds for distributive education until we had but $450,000 for all of the 48 states. Diversified occupations programs with distributive and office occupations student-trainees were no longer reimbursed. To my knowledge, no distributive teacher education programs were dropped, but no new ones were added with the exception of Virginia Polytechnic Institute in 1954, and State College of Iowa which had been started earlier. The one saving grace during the years of gloom was our association with the late L. T. White, Vice President of Cities Service Petroleum Company who bolstered our morale and aided us in many of our problems.

In 1954, Mrs. Doris Willis completed the first doctoral dissertation entirely devoted to distributive teacher education. In 1957, the first Texas bibliography for distributive education was published for nationwide distribution. A revision followed in 1959. This was a great help to D.E., as were numerous other publications produced by the University of Texas Extension Division. Throughout the 1950's many states produced courses of study -- Washington, Virginia, Ohio, Texas, Oklahoma, Temple University, Western Michigan University, and so on.

JOB STUDY GUIDES

This decade resulted in a variety of job study guides. There was the Denver Plan unit, adapted to D,E, by H. D. Shotwell of Kansas; the Missouri job study guide; the Alabama job study guide; the card system, which apparently originated in Oklahoma and was adopted in Minnesota and Ohio; and the Texas individual study guide. Industry would have financed the production of job study guides for occupations if we had been able to get together to back one of the systems. The inherent weakness in most of them were the problem of keeping up to date with the constant changes in reference materials and also the fact that there was too much trouble involved in obtaining reference materials. One exception to these objections was the Denver unit which was self-contained -- all of the materials were contained in the packet. Later, Texas produced self-contained packets in a number of merchandising areas. Now that programmed instruction has been introduced, many distributive educators see a great potential for converting former materials to programmed texts.

It seems to some of us that programmed instruction in the technical competencies area deserves careful consideration in the project plan, and I hope that it will enter into the task force deliberations. Recently, a graduate class at the University of Minnesota was asked to interview a wide variety of employers regarding the competencies expected of employees in selected jobs who had completed one year in their positions. Without exception, these employers indicated that product information had top priority. Let's heed their admonition and let's follow the examples of our counterparts in England, Sweden and the West German Republic, who learned long ago that public opinion supports the teaching of product information much more enthusiastically than the teaching persuasive techniques.

THE RECOVERY PERIOD

During the last half of the decade federal funds for distributive education were restored. New distributive teacher education programs were established at Arizona State University, the University of North Carolina and the University of Tennessee in 1957. Teacher educators took a more active role in regional conferences. Research committees were established in the Central and Southern Regions. The Central Region Research Committee collected placement data on cooperative student trainees annually over a period of several years. These committees were composed largely of teacher educators although several state supervisors were very active members.

In 1958, the U.S. Office of Education held the First National Conference on Adult Distributive Education in Austin, Texas. Course content and teaching methods were discussed. Two bulletins treating adult D.E. were published by the U.S. Office. One dealt with the training of adult education teachers.

Finally, the first federal bulletin dealing with the total distributive teacher education program was published in 1959.

SUMMARY OF THE 1950'S

The fifth decade had its ups-and-downs, going from high to low and back to high, in response to Congressional appropriations of distributive education funds. Not many institutional full-time distributive teacher education programs were established as compared to the preceding and succeeding decades. L. T. White befriended distributive education and lifted our morale during the lean years. The first doctoral study devoted entirely to distributive teacher education was completed. The Texas bibliographies were published; state departments published many courses of study. Federal funds were restored. Regional research committees were organized. The U.S. Office of Education published bulletins on the adult program and the total distributive teacher education program.

THE EARLY 1960'S

During the early 1960's distributive teacher education made excellent progress. These were the years when teacher education gained stature among distributive educators. Teacher educators established their identity as a professional group.

THE YEARS PRECEDING THE VOCATIONAL ACT OF 1963

In June 1961, the U.S. Office of Education held the first and last Conference of National Leaders in Distributive Teacher Education in Chicago. The report of this conference, titled "Guidelines for Teacher Education Programs in Distributive Teacher Education (1962)," is the most comprehensive publication on distributive teacher education to date.

In 1960, the National Association of State Supervisors of Distributive Education revised its constitution. For some reason, teacher educators were not included among those eligible for active membership. This prompted the establishment of a separate organization for teacher educators, which after considerable discussion was named the Council for Distributive Teacher Education. A constitution was adopted by the group at the December 1961 meeting of the American Vocational Association. In spite of the opposition to "splinter groups" the request for acceptance as an affiliated organization was approved by the Distributive Education Policy and Planning Committee and Vice President, and endorsed by the AVA Executive Board.

At the 1962 Central Regional Conference a formal request was made of the U,S. Office of Education for a meeting of teacher educators. The request was granted and a three-day conference was held at State College of Iowa, Cedar Falls, in October, 1962. During the early 1960's Dr. Rupert Evans, Chairman of the AVA Research Committee met with distributive teacher educators to encourage the establishment of a D.E. Division Research Committee. A request for a research committee was approved by the Vice President and the Policy and Planning Committee. Since that time there has been a meeting including D.E. research at each AVA convention. The efforts of this committee resulted in the publication of the Review and Synthesis of Distributive Education Research by the Center for Vocational and Technical Education located at Ohio State University.

INITIAL EFFECTS OF THE VOCATIONAL ACT OF 1963

The provisions of the Vocational Act of 1963 are well known to this audience, so there is no need to review them here except to say that the admonition to provide vocational education for all people, including those with special needs, should be given careful attention. Project training allows for the education of persons not normally included in the cooperative plan. Through our experience in teaching those with special needs, we know from the history of other disciplines that we learn more about the needs of "normal" learners. We find teachers and administrators of special programs in our classes. These class members are influencing us even though we may not realize it.

NEW TEACHER EDUCATION PROGRAMS

The 1960's have already provided the establishment of more institutional teacher education programs than any previous decade. Those listed in the Directory of the Council for Distributive Teacher Education are: the University of Idaho, 1962; the Universities of Georgia, South Florida and Wisconsin, 1963; Bowling Green University, Indiana State, and Montana State Universities in 1964; and recently, the Universities of Alabama, Maryland and Washington, and Rutgers University. Undoubtedly there are others that were not listed. As the number of distributive teacher education institutions grows, our communication problems increase.

TEACHER EDUCATION FOR ADULT INSTRUCTORS

The second national conference on adult distributive education was held at Indianapolis, Indiana in December, 1962. Unfortunately, the number of persons enrolled in adult programs has not kept pace with that of the secondary schools. It seems reasonable that attention should be given to this important aspect of distributive education by teacher educators.

SUMMARY OF THE EARLY 1960'S

During this decade so far we have witnessed the first national conference on distributive teacher education, the publication of a bulletin on that conference, the organization of the Council for Distributive Teacher Education, the only regional conference on distributive teacher education, the organization of the D.E. Division Research Committee, the second national conference on adult distributive education, and the publication of a review and synthesis of research in this field. The nature of enrollments in distributive teacher education classes changed, and more full-time institutional teacher education programs were established than during any complete decade.

CONCLUDING REMARKS

Obviously, distributive teacher education has waxed and waned with the total distributive education program, which in its brief history has had a number of crises. Like many educational programs, it started in a private school. Up to this time it has kept close ties with the industry it represents.

Distributive education is distinguished among occupational fields by representing a people-oriented occupational cluster with roots in the behavioral sciences. Since the behavioral sciences are less concrete and exact than the physical sciences, the competencies involved in distributive occupations are more difficult to measure, and it is more difficult to distinguish between those who are trained and those who are not. This causes distributive education to be vulnerable.

Distributive education will continue to be vulnerable until it is able to establish, in cooperation with the business world, occupational entry standards for a number of distributive occupations.

Distributive education must take the initiative in such a venture, and distributive teacher education must take the initiative among distributive educators. Thus we are faced with one of the most important jobs in our history. We cannot afford to procrastinate, so let's get started.

Gearing the Teacher Education Program for Teaching by the Project Method[*]

PHILOSOPHY

Although this philosophy is applied to all areas of vocational education, one should not be satisfied with just."Learning by Doing." It is all right as far as it goes but "learning by doing" is not necessarily vocational. For the sake of argument, consider two desired outcomes of distributive education which are commonly discussed but seldom included in a statement of philosophy. One is *social competence* and the other is *economic independence*. It is suggested here that the philosophy of DE be stated as: *Teaching individuals to become socially competent and economically productive through organized and systematic programs of activities, all of which are directed toward ultimate job objectives of successful occupation in the field of distribution*.

The study of distributive vocations, therefore, should embody real life situations. *This is a concept of education in life itself rather than just preparation for life in the future*.

The second bit of philosophy for your consideration involves a responsibility of the teacher-educator other than *preservice* and *inservice* teaching. It can be stated as: *The DE teacher-educator has the responsibility to teach and train school students (below baccalaureate level) and adults to become competent and actively involved in the field of distribution through a third person called a teacher-coordinator*. Unless the second statement of philosophy is accepted, much of this paper may appear to be directed to the teacher-coordinator rather than the teacher-educator.

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[*] Prepared by Ralph A. Rush, Teacher Educator for DE at Rutgers - The State University of New Jersey for the 1967 National Seminar in Distributive Teacher Education

THE PROJECT

A definition more descriptive of the DE concept would be: Projects consist of all practical activity of educational value conducted by students inside or outside of class for which systematic and progressive instruction and supervision are provided by their teachers, parents, employers, or others appointed in authority. If properly selected and planned with the student, projects can have great motivational value.

WHY THE PROJECT METHOD OF TEACHING DE?

This question is creating a great deal of discussion if not as much interest and thought. The questioning of the method should be looked upon with favor for it is indeed needed to stimulate answers which can dispel doubt and confusion. It must be accepted by all, however, that projects are now an integral part of DE--not an appendage. It is a fact by law, and teacher-education is on trial in directing the course it will take.

In organizing for the project method one should be constantly aware that the objectives are the most important consideration and the very first step. The project, therefore, should be planned around the objectives. In this way projects can provide an excellent basis for adjusting learning situations to the different levels of students' abilities. This, unfortunately, has not been done with any notable success by other methods.

IMPLICATIONS FOR TEACHER-EDUCATION

The student will usually reflect the attitude of the teacher-coordinator. Just as the architect designs a building, a lawyer plans a defense, the coordinator must plan the project. In each case, the builder, the defendant, or the student must play an important role in the planning and the coordinator must keep this in mind. It is the first responsibility of the coordinator to see that the students give time and thought to the development of both short- and long-term objectives. This means that DE teacher-education has the opportunity to direct the development of the project method in such a way that one of the outcomes will be to lengthen the student's objective span. Educators are often accused of talking in terms of long-term objectives which are beyond the comprehension of many, if not most, students. Systematic planning to lengthen the student's objective span through projects may be the answer to this criticism.

All too often projects are being talked of as meeting the requirements of law rather than accomplishing definite purposes in training. The purpose of the project must be looked upon as an application of learning as well as a means of learning. Content cannot be allowed to end with emphasis on fundamental principles, theories and skills--it must involve application. The present use of the project method may satisfy the letter of the law but then fall far short of the ideals and objectives of those who look to the method as a means to train young people to become a part of ongoing productive enterprise. Participation in distribution is necessary to a student's learning distribution--he must have the opportunity to practice what has been dealt with in class, either at work or in a laboratory with proper environmental setting.

This is not meant to imply that by use of any method should the coordinator expect to develop in students all of the abilities needed for proficiency.

It is implied, however, that education in distribution by the project method should make a significant contribution toward this end, within the limits of the ability of the students.

A good projects program will provide opportunities for practice in the various aspects of business necessary for success. This includes selecting and planning, implementing and conducting the project, recording data, preparing reports, evaluating results, interpreting experimental results, and making use of them in real or simulated distributive occupations. Such a program must provide the student with the opportunity for learning to perform certain skills and to make varying degrees of managerial decisions.

If in-school training is to be anything approaching optimum meaning to the student, he must also be provided with the opportunity to continue his training program after he leaves school. This has great implications for continuing education or adult programs in DE which should be a concern of all teacher-educators.

ORGANIZATION OF PROJECTS

Until such time as this new approach to DE has matured into "continuing projects" (progressive for long periods) each project probably should be short, both in time and realizable objectives. Not only would each project have its own immediate objective but should serve as a basis for others with additional and usually more advanced objectives. Only then would each project become part of a systematic preparation toward an ultimate objective.

The content of a progressive series of projects should be derived largely from the students' needs and in terms of the types of local business activity. The unique teaching opportunity in projects is that all instruction can be based on individual needs and interests, and developed on the basis of individual students' problems and abilities. Some projects can be made on a selective basis to represent a fair composite of the interest of all of the members of the class. However, full opportunity must be provided for the individual needs of the pupils. Thus the students, with the help of the coordinator, must plan, study and execute the project, which means individual and group as well as class projects.

The program of projects must be flexible and be primarily organized around the business activity involved. Information and subject matter will be achieved through project activity if the project is properly designed. Flexibility is important in this design because it admits of constant reshaping of project activities in terms of the educational needs of students and facilitates departmental operation.

In planning project curriculums for the present, it would seem wise to start with what is already known and practiced and then grow into the more experimental and developmental programs. A parallel with other curriculums developed on the unit structure already exists in the cooperative program. In the cooperative program one usually finds a progression of units each with its own major and minor objectives arranged in such a way as to systematically contribute to an ultimate objective, as follows:

Unit I →	Unit II →	Unit III →	Ultimate
Major Objective	Major Objective	Major Objective	Occupational
Minor Objective	Minor Objective	Minor Objective	Objective

This should lead one to ask such questions as if the project method should be conducted as units of instruction or be designed as individual, group or class projects or activity? If a progression of projects are properly arranged, would the knowledges, as well as skills, be developed through actual project work? Would each project systematically contribute to the next so as to achieve a pre-determined occupational outcome? Following the already familiar pattern of unit instruction, a progression of projects might look like the following:

Project I →	Project II →	Project III →	Ultimate
Major Objective	Major Objective	Major Objective	Occupational
Minor Objective	Minor Objective	Minor Objective	Objective

The DECA has much to offer in the way of projects and provides a stimulus for gaining almost immediate acceptance of student projects. Without realizing it, student members are already engaged in meaningful projects. DECA should, however, be considered a part of the curriculum and it can be justified only as it makes a significant contribution to the educational program of DE students.

THE JOB OF THE COORDINATOR

All too often teacher-educators become so involved in the myriad of duties within their own institutions they forget that their first responsibility is to the job being performed by the local coordinators. It is the success or failure of the coordinator's job by which the teacher-educator's performance can best be measured.

As far as the project method is concerned, the primary job of the teacher-coordinator is to provide the student with the background experience, sufficient understandings and skills necessary to be successful in the particular job he chooses. As students will usually present varying backgrounds and interests, one must not overlook the fact that many will want to seek employment in related fields. Various aspects of other vocational services, such as selling farm products, machine parts, textiles, etc., are often particularly attractive. In assisting each student in developing a good project program, the coordinator needs to understand the value and purposes of projects:

1. What are the major aims of the project method?

2. How does the project improve the effectiveness of instruction in DE?

Coordinators must assume the responsibility for guiding the pupils in making wise choices. Not only should immediate needs be considered but varying conditions of enterprise locally, state and nationally must be considered. Particular attention should be given to trends, for it is not enough to train one for a job -- it is necessary to educate him to adjust to change in order that his skills and knowledge will not soon be outdated. In planning consider the following statements. A project should:

1. Relate to an important part of the subject matter the student is studying in class

2. Grow out of a real vocational need

3. Provide all possible experiences in the job around which the project is developed to include experiences in those areas closely but not necessarily directly related

4. Aid in the development of favorable attitudes

5. Aid in development of abilities of cooperation

6. Provide opportunities for "try out" or exploratory experiences

7. Fit a specific business activity

8. Involve new experiences on the part of students

9. Extend through a complete, natural cycle of specific business activity

10. Be under the managerial and financial control of students as much as possible

11. Be performed by the students to the extent that physical or economic conditions permit, but in any case under their management

12. Be large enough in scope to provide a challenge

13. Be selected early in the school year

14. Be recorded by students in sufficient detail to indicate adequate preparation and responsibility for the work

15. Be summarized, analyzed, when completed, in a final report

CLASSROOM AND LABORATORY

A DE laboratory, implied in the project approach, should be provided as a functional and realistic setting, i.e., a school store. Here management, supervisory decision-making experiences as well as the performance of judgment and manipulative skills are possible. Such a laboratory must be flexible and allow for the creation of many environments.

Equipment needs and supplies depend on such factors as:

The needs, interests and abilities of the students

The number of students enrolled

Finances available

Ability of the coordinator--resourcefulness

The content of the materials being covered

The needs of the community

Others

In addition, the total school program should be carefully investigated to determine which subjects and co-curricular activities might contribute to the students' immediate and ultimate objectives. Thus the coordinator becomes involved in guidance.

Basically, the facilities needed are two: 1) The classroom 2) The laboratory.

ATTITUDE OF THE EDUCATIONAL INSTITUTION TOWARD DE

To say that a particular school or department is vocationally oriented does not necessarily mean it looks with great favor on DE. Historically, vocational schools or departments are administered by persons with backgrounds in other vocational subject areas, typically T & I and Vocational Agriculture. In all too many instances, DE is relegated as an incidental vocational service and has to make do with what is "left over."

This applies even more so to the comprehensive school where one is likely to find heavy emphasis on college preparation. Often in such schools, all areas of vocational education are de-emphasized or used to relieve the academic classes of those students who are problems, not interested in preparing for college, or who realize they will not be able to afford such an opportunity. Rarely does one find an administrator of a comprehensive school who has a background in vocational education or a vocational philosophy.

Carry this one step higher and consider distributive education at the teacher education level. What is the background of the administrator of your program? Is the teacher-education curriculum in DE built around some other subject area which existed prior to the time DE was included? Are admission requirements, qualifications of faculty, library materials, equipment and facilities the same? Are all of these designed for the purpose of serving the needs of preparing teacher-coordinators of DE or are they designed to satisfy minimal requirements within the framework of already existing programs?

EVALUATION

The dynamic nature of distribution demands continuous evaluation of all educational programs in distribution. In every evaluation the characteristics of a good project program should be determined. When the demands of distribution have been established, attention can be given to the program of instruction. The best method of measuring the vocational value of such programs is by what the student does with what he learns. If he needs what he learns and uses it immediately or reasonably soon, he profits most by it. If he has no immediate need or use for the training, there may be some deferred values but these are always indefinite and uncertain. If he is not planning to soon use what he has learned, his interest in the program of instruction is apt to be a rather low ebb. The basis for such evaluations are the immediacy of application of the stated objectives and the degree to which they are accomplished. This can also be said about DE teacher education.

PROBLEMS TO OVERCOME

It is true that many of the problems which will be faced by the teacher-educator will be administrative in nature and involve decision-making bodies outside the functions of teacher-education. This does not, however, relieve the teacher-educator of his responsibilities of bringing his influence to bear whenever and wherever the decisions are being made. Some of the areas where resistance to change may be expected are in the areas of:

Financing Teacher Education

Time

Space

Travel

Work Experience

Recruitment of Faculty

Recruitment of Students

Business Involvement

How much business involvement is desirable?

By the Student?
By the School?
By the Business?

CONCLUSIONS

In summarizing this paper, the following major conclusions were drawn:

1. The project method of teaching DE is a fact in law and whether it should or should not be incorporated as a part of the total program is no longer a worthwhile subject of debate.

2. The teacher-educator of DE is responsible for the place the project method will occupy in the total program and for its structure.

3. If properly developed and directed in its beginning, the project method can be a highly successful approach in serving the needs of those interested in employment in the field of distribution. If a proper beginning is not made, patterns are likely to develop which will not best serve the needs of these individuals.

4. If the project method improves education for distribution, the teacher-educator can rightfully accept the credit. If, on the other hand, the result is a weak and ineffective method, the teacher-educator must accept the blame.

Relations of Teacher Education to State Staff*

INTRODUCTION

Much has been written that we are in the day of change. We recognize this with a nodding acquaintanceship, but have we really accepted it in the field of Distributive Education?

There is little need here for the history of cooperation, or lack of cooperation, that may have existed between State Education Departments and Teacher Education Centers. Today, we must have planned togetherness and calculated interdependence to solve the manpower needs of this country. Cooperation must be extended by teacher-educator and state staff personnel because we have a consortia of educational agencies attacking problems that involve the area(s) we serve.

State Departments and Teacher-Education programs need to exist with public and private agencies of many types. Many of our new friends will offer something different in their expertise to help us solve educational problems. They need leadership and assistance and we need theirs. To remain aloof means putting ourselves out of existence in short order.

THE CHALLENGE

The responsibility to provide educational leadership in marketing, merchandising, and management is an awesome challenge. The responsibility to develop teachers from undergraduate, graduate, and in-service ranks is a major task. The need to provide the prospective teacher with a much richer occupational background in depth and scope of understanding projects is a major hurdle. Can teachers be prepared in four years for all phases of the program?

Another avenue that must be covered deals with the breadth and depth of the emerging program. Where do we secure special teacher education for the post secondary programs of specialty, the adult program leadership, and for the junior high school teachers that introduce the broad aspects of the program? How do we work effectively to develop quality teachers for work in the schools of our inner cities? What type(s) of teacher-educator program for those teachers who work with the disadvantaged youth and adults?

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* Prepared by Eugene L. Dorr, Assistant State Director of Vocational Education, State Department of Vocational Education, Phoenix, Arizona, for the 1967 National Seminar in Distributive Teacher Education

Do we know why those who have taught twenty years or more had the lowest mean score on attitude toward children as revealed in the five-year study by Chadderdon, Coon, Ford and Lehman? If this is so, then what type of in-service work needs to be done with current teachers? How do we handle the serving of the educational mix and/or the occupational mix in preparing teachers?

The above list is only a start on what looms ahead in the program for teacher-education needs in preparing and updating Distributive Education teachers.

WHAT IS OUR CHARGE IN TEACHER EDUCATION?

Dr. John I. Goodlad of the University of California at Los Angeles, Professor of Education and Director of Research and Development Division, said:

> The most important task for our schools during the next year -- and for many generations to come -- is their daily practice and demonstration of these qualities of compassion, sensitivity, sound judgment, flexibility, adaptability, humility, self-renewal and many more that we have long claimed to be seeking in the human products of education.

He also goes on to say,

> This does not sound like a very exciting charge (yet) it is difficult to detect in the classroom common use of such psychological concepts as goal setting, motivation, positive reinforcement, evaluative checking, and so on.

Teachers have been oriented to "coverage" and to "telling"; therefore, developing the process of induction and discovery is not compatible with the modes of teaching long used. Professor C. Robert Pace found in his study, "The College and the Student," that a large number of students in higher education, especially in large universities, felt that the program did not reach them in any deep and significant way, that they did not participate in its planning, and that it was not planned with their lives in mind.

Do these statements have meaning in Distributive Education? If so, do we need to do something about this in teacher education for Distributive Education?

Teacher Education must provide influencing leadership through innovation and experimentation.

THE CHARGE FOR STATE DEPARTMENTS

Some state departments have been far too busy checking policy, tabulating results, and following obsolete patterns of doing the same old thing to be very creative or interested in the individual. To continue on this path will only bring conditioned frustration.

The new State Department of Vocational Education must provide leadership and must be willing to experiment and pilot new concepts in program development and funding. Decisions must be made with an eye on manpower needs and costs of producing results. Goals must be clearly identified and proper evaluation standards must be built into projects to insure that results, good or bad, are part of the package funded.

State staff people must work to develop education for students that works around clusters of jobs. Adaptability and versatility must be key words in planning new programs or in reviewing existing ones.

The State Department of Vocational Education will only maintain a sound position in occupational education if it provides bold and creative leadership.

FUNDING THE PROGRAM

Alternate ways of financing a teacher-education program must be explored. An expanded teacher-education staff will be most necessary to organize an all-out drive on the several fronts that need to be attacked.

Following is just a start on a laundry list of possible additional avenues of funding for teacher-education programs:

1. Regional Conferences such as the Designing Education for the future on eight-states study need to be explored. The direction in this type of study would be to properly utilize special opportunities that exist on the several campuses or in state staffs to focus on a common geographic problem. Shared cost of such programs could be handled by a national grant or prorated by the several states involved.

   Reciprocity might exist in a region in providing special teacher-education programs on key campuses that have special talents in other disciplines. This would include transfer acceptance of graduate credits for advanced degrees beyond the normal low limits of six hours.

2. Inter-state cooperation on offering special programs of need for certain cities in the inter-state concept. EXAMPLE: California, Arizona, and New Mexico might offer a special program for inner-city needs for Distributive Education to disadvantaged youth. Each state could share the cost of such a workshop.

   Cooperative planning should involve all related elements having a share of responsibility in improving and solving manpower needs of the inner-city.

3. Special 100 per cent funding by the State might be secured for special projects dealing with serious needs that must be solved. EXAMPLE: alternate ways of providing adequate and effective Distributive Education for students in small high schools. Funding like the above might also be used for better in-service activities through teacher education.

4. Escalator clauses in funding might be explored with State Departments of Vocational Education to pioneer expanded staffs

in teacher education centers for tooling up the number of teachers for an expanded program on several fronts. Funding would decrease in direct ratio to fees collected by the institution. EXAMPLE: Additional staff cost might be $20,000 less tuition and fees collected through programs and classes offered by the new staff. If $6,000 were collected the first year, the State Department of Vocational Education would fund $14,000.

5. Relatively easy funding for pilot and experimental programs should be available through state sources. Funding in projects of this sort might require cooperation among several state agencies dealing with manpower needs and problems. EXAMPLE: Employment Service, Welfare and Vocational Education might work together to pilot a new program to help ease a manpower need.

   Special demonstration type centers might need to be used to pilot new concepts in program development. High visibility should be given the demonstration activities. These centers should have adequate and continuous contact with teacher-educators. Funds to do this experimenting should be available.

6. A school district or districts in the state might well share in the cost of funding special in-service workshops or occupational up-dating of their Distributive Education staff. These workshops could be more specialized to the particular needs of one community.

7. A trade association, business organization, or foundation might help share in the funding of special material development or in-service work with training sponsors, or occupational experience for Distributive Education teachers.

CURRICULUM MATERIALS

The State Department staff and Teacher Educators also share in curriculum development.

Not only must research on curriculum development be established, but we must also establish ways of implementing the results. Sharing, exposing, and adopting sound principles must be a continual part of pre-service and in-service Teacher Education Programs. The State Department of Vocational Education must work cooperatively with teacher educators in a continuous program to develop quality education to make obsolete our most cherished techniques if they are proven false.

Special attention to proper evaluation must be given a number one priority. This type of evaluation requires that greater effort and funding should be placed on research that truly explores whether the goals are being reached.

Expanded funding in the area of curriculum and teaching guide development and research is vital to meeting the challenge of need for well educated people in marketing, merchandising, and management. The challenge of a changing market place with changing needs of education for the people that serve this market should make our tasks all the more interesting and exciting.

In conclusion, let me stress that this short paper has tried to express three basic ideas.

1. We no longer have time to discuss amongst ourselves who has prime responsibility. The task is ours - let's get on with the solving of manpower needs by educating the teachers needed to teach!!

2. Funding is available if we optimistically seek to do the task and put our antennas out for ways that will provide help in solving a problem. We need to provide through teacher education, training adaptability by the teacher for a variety of educational and institutional settings.

3. We must cooperatively develop evaluative criteria that truly measures for the results required of the occupations we are educating for in Distributive Education. Funding to accomplish this task must be established so that research can be done. Proper attitudes must be developed for acceptance of change as we prove obsolete some of our most cherished techniques and practices.

Our responsibility, as noted in the Vocational Education Act of 1963, is to serve all people in all parts of the land with vocational education. This provides an awesome challenge and a wonderful opportunity to serve humanity. We must assume our obligation now and not allow time to slip by, as time represents people who should be served. We have the creative talents; we know how to sell the Distributive Education program. Having accepted the challenge, our task is one of getting on with the job.

Methods in Distributive Teacher Education Classrooms*

The development of a competent person in distributive education, whether he will be a teacher, teacher-coordinator, supervisor, program administrator, or teacher-educator, should be the primary goal of a distributive teacher-education program. The means to achieve this competence are the major tasks of the distributive teacher-educator. Persons enter the teacher-training program with a variety of backgrounds, abilities, interests, prejudices, and ideals. Somehow, the teacher-trainer must acquire the necessary knowledges, skills, attitudes, and understandings to develop in his students the kinds of competencies necessary to be skilled teachers of marketing and distribution subjects.

The concern is mainly one of assisting the teacher-trainee to develop the kind of behavior which will make him an effective teacher. Ryans has suggested that this behavior involves "information exchange" and "information processing" on the parts of the teacher and the students so that the information may be incorporated into the students' behavior.

Basically, then, teaching involves the transmitting and processing of information--information being used in a broad sense to include knowledges, understandings, skills, and attitudes. This does not mean, however, that the student will acquire competence just because information is transmitted. There are many other variables, e.g., individual differences of students, that could affect desired outcomes.

The purpose of this paper is not to discuss the student variables, but to center on methods of teacher-training which are considered to be effective in helping the prospective teacher become proficient in using the project method.

It seems that teachers will teach the way they have been taught. That is, they tend to use the methods they experienced in their own training. This was dramatically brought to light as a result of a follow-up of persons who participated in a Directed Occupational Training Workshop in Distributive Education during the summer of 1966 at the University of Minnesota. Teachers were using many of the methods, such as critical incident reports, narrative job descriptions, case studies, business games, etc., that were developed during the workshop.

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*Prepared by Dr. Richard D. Ashmun, Assistant Professor of Distributive Education in the College of Education, University of Minnesota, for the 1967 National Seminar in Distributive Teacher Education.

Therefore, the teacher-educator should emphasize the kinds of methods that the teacher-trainee will take with him after graduation and into his teaching assignment. If he has been taught with nothing but lectures, that is most likely the way he will teach. Incidentally, this fact also has a bearing on the selection of a supervising teacher for the student teaching assignment. The supervising teacher should be adept at using appropriate methods so that the teacher-trainee will have the opportunity to observe and/or utilize effective teaching methods in a real setting.

An attempt will be made in the remainder of this paper to outline specific methods which are appropriate in developing competent distributive education personnel. It is difficult to separate methods in teacher-training from the technical content courses, as well as other distributive education courses, because there is a "weaving process" that takes place on the part of the student. He is continuously interpreting (synthesizing) parts of the total program into his behavior. It is also difficult to separate the methods used to teach about project training and cooperative training, as the student is learning about the two methods at the same time.

The student is also continuously evaluating to determine which kinds of things he will actually use and those which he will not accept as part of his behavior. In other words, he is in a continuous adjustment process, looking toward the day when he will have his own class of students.

An appropriate way of categorizing methods seems to be a parallel to the three-phase breakdown of a typical distributive education program. There are those methods and activities which are utilized in classroom instruction, in on-the-job training, and in club activities. Since a student under the project plan doesn't usually hold a job, the teacher-trainee must be assisted in becoming proficient at finding substitutes, or parallel learning experiences, for on-the-job experiences. The remainder of this paper will be devoted to describing how teacher-trainees can be taught to use project methods under the project plan.

II. ORIENTATION

The most appropriate vehicle to use in teaching about the project plan and the project method is the methods course in teacher-training. The course may be anywhere from one quarter, or one semester, to a full year in length. The full year seems to be preferred, and forthcoming comments will be based on this assumption.

COMMUNICATIONS - TRANSMITTING INFORMATION

Teacher-trainees must first learn about the job of the distributive education teacher, i.e., qualifications, the kinds of duties he performs, the types of students enrolled, what the total program includes, and what is meant by professional competency. The process is mainly one of information gathering at this point to help the students gain insight into the program. Projects consist mainly of assigned readings, with the students making an appraisal of what they have read through written assignments.

A field interview may also be used in which teachers and teacher-coordinators are interviewed to determine what is involved in the job. Teacher-trainees are also exposed to a role-image of the person in an actual teaching position, and have the opportunity to interact with the person. Reports may be given to the entire class after the visits.

The next step would be to learn about what is meant by distributive occupations. Assigned readings are again appropriate along with a critique of the readings. One project is to have the students identify or list a number of distributive occupations, using their background of experiences, the Dictionary of Occupational Titles, the Standard Industrial Classification, or other materials. An attempt should be made to classify these distributive occupations into selling and non-selling categories according to the Standard Industrial Classification, or according to the recent coding system set forth by the U.S. Office of Education.

Once distributive occupations are identified, an attempt should be made to identify the competencies necessary to perform efficiently in the various distributive occupations. A project is to present the students with a comprehensive list of actual duties, or have the duties placed on individual slips of paper. A card-sort method may then be used to categorize the duties into the four areas of basic skills, social and economic skills, technology skills, and discipline of distribution skills; or according to career development skills, occupational adjustment skills, and technology skills.

ORGANIZATION

The previous activity provided some clues as to what should be taught in a distributive education program. However, the students need experience in determining at what grade level each should be taught, in which unit of instruction each will be placed, and what level of competency is desired at the various grade levels. It is at this point that the teacher-trainees should learn about the project and cooperative plans, the goals of each, and how each should be organized to meet the needs of the students.

Written materials are assigned for reading, but a more effective means is to use a field observation activity in which the students visit a distributive education program in one of the nearby schools. They should be encouraged to sit in on one class which includes students enrolled in the project plan, as well as a class of cooperative students. In this way, they can observe and make comparisons of the instructional methods used at the two levels. They could also observe and talk to students who are actually working on projects. Upon returning to the methods class, the students could give individual reports on their presentations, or select several students to serve on a panel to present their findings and answer questions from the group.

Students may also be able to determine from the above activity what units of instruction are included at the two grade levels. The list of competencies previously mentioned may once again be used by having each student decide which competencies should be developed in specific units; e.g., which competencies should be included in salesmanship, merchandise information, personality development, etc. The card-sort is appropriate for this activity.

UNIT AND LESSON PLANNING

Unit and lesson planning start logically with a determination of objectives or outcomes to be achieved. The lists of competencies previously utilized again provide clues for the desired outcomes. However, students are usually inept at verbalizing and putting these into writing. Research and investigation of written materials, such as the Taxonomy of Educational Objectives, provide a basis for the writing of objectives. This becomes especially important when students must keep in mind what objectives should be achieved under the project plan as well as under the cooperative plan. For example, what level of proficiency in selling is desired at the eleventh grade as compared to the twelfth grade?

An effective project is to have students formulate objectives for a specific unit of their choice, as well as for a daily lesson plan. Through class discussion, these objectives are appraised by the group for appropriateness, wording, and whether an adequate evaluation or testing of the objectives could be made. In a similar manner, the content for each student's unit and lesson plan could be discussed.

SOURCES AND SELECTION OF MATERIALS

It is difficult to separate this procedure from the development of the content. The two go hand-in-hand. However, the teacher-trainee usually has a legitimate concern over what materials to use and where to find them. This is especially true under the project plan, as most project development has had to be done with reliance on the initiative of the teacher. Few materials have actually been published. Perhaps this is the way it should be, as projects should be appropriate for the goals of individual students.

Obvious sources of written materials may be researched, such as textbooks, courses of study, manuals, periodical articles, reports, etc. However, many times more valuable materials and experiences may be available elsewhere. One such example would be to have the teacher-trainees plan and conduct a field trip to an agency such as the Small Business Administration. Insight can be gained into the operation of the agency, the educational programs it is prepared to assist in developing, and the kinds of available materials which may be utilized in classroom instruction. An example would be the recent curriculum guides available from the S.B.A.

Another less obvious source is the businessman himself, or trade associations of business. Many businesses have published materials that may serve as the bases for projects. A teacher-training activity would be to have each student write, or preferably visit personally, at least one firm and bring back to class examples of the materials he was able to obtain.

D.E.C.A. may also serve as a valuable source of ideas for projects. The Creative Marketing Project, sponsored by Sales and Marketing Executives, would be a good example. A method for helping students become aware of these projects would be to have them serve as judges for project events during the state leadership conference. They may even serve as customers for the sales demonstrations contest. If possible, it would also be an extremely valuable experience if each teacher-trainee could attend the national leadership conference of D.E.C.A. Sample abstracts of a number of projects are available at this conference that would be helpful to a prospective teacher.

PROJECT PLAN OF EXPERIENCES

A buzz session may be used to obtain ideas for projects. A frame of reference could be the Standard Industrial Classification. The idea would be to have each buzz group suggest the format for several projects in one or more classifications. It should be stressed that the suggested list of projects may be the basis of a project training plan for a student who had selected a career goal in a particular classification. In this way, kinds of projects are stressed, as well as the fact that a plan of experiences is as important for a project plan student as it is for a cooperative student in order to make instruction vocational in nature.

Formally or informally, each student in teacher-training also has his own plan of experiences to follow in order to receive his teaching certification. It should be pointed out to each individual student that everything he does fits into a plan. He takes certain courses, completes assignments and projects, has had or is getting adequate occupational experiences, completes student teaching, and participates in student professional organizations. The carrying out of the plan results in achieving the designation as a distributive education teacher. The teacher-trainee should be able to make the transfer to his own teaching situations, i.e., be able to recognize the importance and meaning of a plan of experiences for each high school or post-high school student in a distributive education program.

III. METHODS IN PRACTICE

The best way to insure that teacher-trainees will use the project method is to have them complete specific projects that may have a carryover effect into their own teaching. Several of these will be discussed in this part of the paper.

SKILL PROJECTS

Perhaps it is generally assumed that audio-visual aids are always used; that they are quite common. However, comments from first-year teachers seem to indicate that more emphasis should be placed on the kinds of aids that are appropriate for specific units of instruction.

An effective method is to have the teacher-trainee develop transparencies for the overhead projector that may be used in teaching the various units. The format for the transparencies can be placed on ditto masters, duplicated, and handed out to the entire class. Each student has copies of all transparencies developed.

Another activity would be to have students develop flannel board presentations on specific topics which include a demonstration before the class. If possible, the presentations should center around a topic that was of current interest and could be utilized in student teaching.

A useful project is to assign bulletin board space to each student for a specified period of time, e.g., two weeks. The student is responsible for developing the theme, layout, and materials; he actually constructs the display through his own efforts. Each bulletin board display can then be rated by the class members according to predetermined criteria. Possibly, a small prize could be awarded for the best display.

Similarly, window display projects may be assigned to individual students or groups of students. The theme, layout, materials and construction are the responsibility of the students. Rating of the displays can be made by the entire group according to predetermined criteria, which illustrates a field observation kind of activity. The window display and bulletin board projects may extend through the entire year.

A project which combines a field interview technique with audio-visual materials is one in which the teacher-trainees contact one or more business firms or organizations to determine what films, filmstrips, charts, tapes, records, and other demonstration materials are used in their training programs. The project helps the students become aware of the many materials that can be obtained from business, in most cases, free of charge. The project can be carried one step further by having students bring these materials into the teacher-training class to give a demonstration before the group. Non-business sources may also be used, e.g., the Small Business Administration, as well as certain colleges and universities.

An effective project which combines the case method with audio-visual materials is one in which students may be divided into small groups of three or four students each. Their task would be to develop a slide presentation, including the pictures and script, that would be five to ten minutes in length. The cases could be similar to those used in the post-secondary D.E.C.A. management decision-making contest which is devised to test skills and understandings in the areas of human relations and merchandising, or any other aspect of marketing. Students have the opportunity to seek out a problem area and then to actually develop the presentation from the beginning.

A similar project involves having the students take pictures of actual window displays to be included in a scrapbook for their own teaching, to be used for bulletin board displays, or for classroom demonstrations. A slide camera is best; however polaroid pictures are also acceptable.

The use of the tape recorder can permeate the entire program. Commercial tapes may be purchased on various topics, but the most effective use seems to be in taping student presentations. They have the opportunity to hear themselves in action, and then to evaluate their presentation for effectiveness.

PROJECTS THAT HELP DEVELOP UNDERSTANDING

Projects to develop self-understanding include the kinds of projects in which the student would be an active participant. He would have the opportunity to "try" himself in various situations. At the same time he is developing greater self-awareness and self-understanding.

One way to accomplish this goal is to have each student take charge of the class when specific methods are covered. He could be expected to use the method that was being discussed. For example, when discussing the resource visitor, the teacher-trainee could be expected to contact and bring into the class an appropriate person who may speak on a prescribed topic such as, "Project Training in Distributive Education."

Role-playing may be used effectively. An example would be to have the teacher-trainees role-play how they would explain the project plan, project method, and kinds of projects to their own class. The teacher-trainee should also have a project that he has developed and wants to present to the class. It may be a programmed sequence of material, a case problem, a survey of some type, a sales demonstration, etc.

The student may also prepare and present a speech that he would give to a business group, a group of teachers, a group of parents, or a group of potential students on "What is a Distributive Education Program?" In the speech, the student would have to explain each level of the program and how various persons would benefit. He would have to understand the project plan in order to explain it. The talk could be rated by other class members for clarity, appropriateness, simplicity, depth, and effectiveness.

The guidance function is extremely important in developing self-understanding. This is accomplished best by working with each teacher-trainee on an individual basis. He has a chance to talk about himself, his progress, his problems and fears, and his goals. He also has an opportunity to obtain individual help on his course work, i.e., he can obtain suggestions and assistance on the work he is doing. He may also want to talk about his future employment. Should he take a position as a project plan teacher only? As a teacher-coordinator only? Or a combination of the two? It is the feeling that if the teacher-trainee experiences this individual approach to his needs, he will in turn work with his own students on an individual basis.

A conference leading situation may be established whereby a student is required to plan and carry out a conference. He practices the technique of getting group participation to solve a problem or answer some question. Perhaps it is a problem of, "What Time Pattern is Best to Achieve Project Training?" Comments and suggestions are received from the group. The conference leader must learn to withhold his own judgments and comments and be able to involve the group in solving the problem or answering the question.

JUDGMENTAL PROJECTS

A difficult, but meaningful, project is to have each teacher-trainee develop a "Program of Work" for one year of operation. It would include a detailed breakdown of all activities to be performed on a monthly basis during the school year. This could include teaching, coordination, public relations, project, administrative, and D.E.C.A. activities. The student must use judgment in order to pull all of these activities together into a meaningful sequence. He must be aware of all aspects of the total program and be able to focus on certain activities at specific times. It is one more attempt to stress planning and organization. If the student does it once, i.e., practices the procedure, it is likely he will do it again when he obtains his first teaching position.

Another major project would be to have each student develop a local plan for a distributive education program in a town or city of his choice. Of course, he needs some pre-set guidelines, but should rely on what he has learned to lay out a local plan that may be presented to a local administrator or to a board of education. Once again, the student must integrate and synthesize his learning in order to develop a meaningful plan. He must explain the purposes and structure for all levels of the program, including the project and cooperative plans.

One of the most important judgmental activities is that of developing appropriate learning activities. The development of objectives was previously mentioned, but the teacher-trainee also must be concerned with the means to achieve the desired outcomes; the means being a choice of appropriate learning activities, including projects. One approach is to have each student develop at least one individual activity or project and one group activity or project appropriate for each unit of instruction. They may be duplicated so that each class member has a copy. The activities and projects may be discussed by the entire class for appropriateness and effectiveness.

Evaluation of performance is also a judgmental task. The performance of teacher-trainees should be continuously evaluated in much the same way their students will be evaluated. The projects and assignments, quizzes, reports, exams, relationships with class members, job activities, and professional activities all serve as a basis for evaluation. It is important that each student receive detailed feedback on his performance so that he will be able to recognize his strengths and weaknesses in order to improve the weaknesses and take self-satisfaction in his strengths.

IV. STUDENT TEACHING

The teacher-trainee puts theory into practice in his student teaching assignment. Most of the methods described previously may be put into actual use. The student has the opportunity to prove his teaching prowess.

An effective means for assisting the student teacher in his development is to require attendance at a weekly seminar. Here is where experiences may be shared, and help may be obtained from other student teachers, as well as the university supervisor. Other resource persons may also be called in to help the students gain insight into the program. Such persons may include teachers, businessmen, the state supervisor, or other university faculty members.

The project plan and project method may be discussed in detail, based on the actual teaching experiences of the students. A tool to use as a basis for discussion could be audio and video tapes that were recorded while a student teacher was teaching his class. Discussion may center around the behavior of the student teacher. What did he do that was effective? Where does he need improvement? How could the situation have been changed? What could he do differently? etc. The new 8mm sound film could also be used for this purpose.

Another important aspect would be the observation and evaluation of the student teacher in his assignment by the university supervisor and the supervising teacher. Observations should be made several times during the quarter or semester. Each observation should be followed by a personal conference with the student to discuss his performance and to help him gain a better understanding of teaching as well as himself in the role of a teacher.

Care must be exercised during the student teaching assignment to make certain the student obtains coordination experience as well as teaching experience. This means coordination of the activities of students enrolled under both the project and cooperative plans.

V. OCCUPATIONAL EXPERIENCE

Many students come into the teacher-training program with appropriate occupational experience. However, some may need to obtain this experience while completing the program. In either case, supervision and guidance are necessary to help the student get the most from the experience so that the implications for teaching may be stressed. Occupational experience is an important source of subject matter content as well as a source of teaching methods and materials. Insight is also gained into the behavior of distributive workers.

Some techniques or methods that may be employed to gain information would be critical incidents, job descriptions (task analysis and psycho-social anaylsis), satisfaction analysis, and satisfactoriness analysis. All of these methods may become the basis for projects of students in the distributive education program.

VI. UNDERGRADUATE DISTRIBUTIVE EDUCATION CLUB

A recommendation is that every teacher-training program should include a student professional organization. Teacher-trainees are more apt to have their own D.E.C.A. chapter if they themselves have had related club experience. The undergraduate distributive education club parallels D.E.C.A. The students run the club through their officers and advisers, hold regular meetings, sponsor interesting programs, and carry out certain projects.

An important benefit from the club is that all students enrolled in the teacher-training program have the opportunity to get acquainted, work together, and share experiences. Esprit de corps is established and students are able to identify with a closely knit group. This is especially meaningful on a large campus where students do not become acquainted during the first two or three years of their program. The club helps bring them together for meaningful activities and fellowship.

VII. SUMMARY

An attempt has been made in this short paper to outline some of the teacher-training methods that may be used to help prospective teachers develop the behaviors necessary to be competent in teaching under the project plan. As mentioned, it is difficult to completely separate methods used to teach under the project and cooperative plans because projects may be carried out under both plans. The important thing is that teacher-trainees use the project method in their teaching. One way of insuring this is to have the future teachers complete projects during their teacher-training. Several of these projects were discussed in the paper. It should be kept in mind that a teacher is likely to teach the way he has been taught! This is reason enough to use a variety of methods, including the project method, in teacher training.

In-Service Teacher Education[*]

What do we mean by in-service education? Do we need a special program of in-service education concerning project training in distributive education? If so, what should be included in it? Who should participate? When and by whom should it be conducted? Each state must find its own specific answers to most of these questions, for such factors as the size of the program, the availability of state supervisory personnel and teacher-education personnel, the geographic location of local programs, and the state of development of teacher-coordinators make it necessary for an in-service education program to be tailor-made for each state. However, it may be helpful to examine the questions to see if we can determine some guiding principles.

First, what do we mean by in-service education? Let me re-phrase the question: what do you mean by in-service education?

Do you conceive of in-service education as credit courses offered by an institution of higher learning?

1. In summer school?
2. In short-term or accelerated courses?
3. In extension credit courses in convenient areas of the state?
4. In late afternoon or Saturday credit courses?
5. In correspondence credit courses?

Do you conceive of in-service education as non-credit group training?

1. In area, district or group workshops - on or off campus?
2. In state conferences?
3. In "cluster" meetings for city, county or other groups that are closely related geographically?

Do you conceive of in-service education as individual training?

1. Through visits to individual teacher-coordinators in local schools?
2. Through conferences with individual teacher-coordinators on campus?

Do you conceive of in-service education as education through written communication?

1. Through printed accounts of successful ways in which the problem has been met?

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[*] Prepared by Lucy C. Crawford, Teacher Educator for Distributive Education at Virginia Polytechnic Institute, for the 1967 National Seminar in Distributive Teacher Education

2. Through a list of selected readings concerning the problem?

It is generally agreed that a combination of these and other activities in which teachers engage for the purpose of improving performance make up an in-service education program.

Second, do we need a special program of in-service education concerning project training in distributive education? The fact that teacher educators from one end of the country to the other "moved heaven and earth" to get away from already crowded schedules of work to attend this seminar is a shining example of the yearning for better understanding of the many principles involved in this new concept in the distributive education program.

Third, what should be included in it? Specific answers should come from teacher-coordinators, themselves. However, a look at some of the professional competencies needed to effectively perform the critical tasks regarding project training should provide a clue to the needs of teacher-coordinators in service:

1. An understanding of the principles underlying the "Project method" and the "project plan."

2. A knowledge of the types of organizational patterns possible within the distributive education program.

3. Ability to plan, direct and evaluate various participating experiences which focus on activities of distibutive occupations and decision-making situations in distribution.

4. An understanding of the structure of the curriculum - both horizontal and vertical.

5. An understanding of the techniques of selecting D.E. students for the project plan.

6. An understanding of ways of coordinating classroom learnings with out-of-class learning activities designed to accomplish stated objectives.

7. An understanding of counseling techniques concerning the guidance of students as they select and move forward toward their career objectives.

8. Ability to select and procure reference texts and other instructional material to use in the preparation of curriculum guides and/or lesson plans.

9. An understandingthat classroom instruction, to be effective, should be based on knowledge, understanding, skills and attitudes needed for entry and advancement in distributive occupations.

10. A knowledge of career opportunities and possible progressions in the field of distribution.

Fourth, who should participate? The answer, it seems to me, lies in the degree of competency each distributive educator has at the time a particular phase of the in-service education program is offered. Since the concept of project development in distributive education is still in the experimental stage, it would seem that for the immediate future, at least, every distributive educator should participate in some form of in-service training.

Fifth, when and by whom should it be conducted? Obviously, it will take a team effort to accomplish the objectives of an in-service education program to meet the needs previously indicated. State supervisory personnel, local supervisors and teacher educators must plan the program cooperatively to achieve maximum results. In my opinion, credit courses are a major responsibility of institutional teacher-education, whereas individual instruction is a major responsibility of state and local supervisory personnel. However, if all those concerned work together toward the overall objective of providing experiences to help teacher-coordinators increase, expand, and deepen their professional knowledges, understandings, skills and attitudes, then decisions about the division of responsibility and the time and place to conduct the program can be made as the problems arise.

SOME GUIDING PRINCIPLES FOR AN IN-SERVICE EDUCATION PROGRAM IN DISTRIBUTIVE EDUCATION

In Ogletree's essay, Person-Centered In-Service Education,[1] he presents a set of 31 characteristics considered to be important for in-service education programs. The list was developed as a result of two extensive surveys of all the literature listed in The Education Index which pertained to in-service education. The two surveys covered the periods 1929-1948 and 1949-1955 and yielded practically identical results. I have drawn heavily on this set of characteristics to derive a list of guiding principles for an in-service education program in distributive education. I am presenting the list for your consideration and will appreciate your letting me know your reaction to it.

To be effective, an in-service education program for distributive education

1 . . . . must be planned and conducted through the cooperative efforts of state supervisory and teacher education personnel in conjunction with local supervisors.

2 . . . . should have clearly defined and understood objectives that are periodically re-examined. These objectives should be based upon the needs and desires of the teacher-coordinators.

3 . . . . should assist teacher-coordinators to understand philosophical concepts concerning distributive education as an integral part of secondary education and in so doing assist them in developing a personal philosophy of distributive education.

4 . . . . should be comprehensive in scope and should include a variety of techniques to meet the need of teacher-coordinators.

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[1] James R. Ogletree, Person-Center In-Service Education, Vol. XXX, No. 1, (Lexington: University of Kentucky, September, 1957), pp. 30-32.

5 . . . . should determine through research the problem in distributive education upon which teacher-coordinators desire assistance.

6 . . . . should determine the particular types of service which teacher-coordinators feel would be most helpful in dealing with their problems.

7 . . . . should recognize that professional growth can come only from within the individual.

8 . . . . should provide assistance in locating, obtaining and using new teaching materials.

9 . . . . should assist teacher-coordinators in selecting and using the most effective techniques and procedures for attaining their problems.

10 . . . . should be organized so that teacher-coordinators are allowed to and encouraged to try out new things which they learn through the program.

11 . . . . should be flexible, so that it can change its techniques as the need arises.

12 . . . . must be continuously evaluated by all individuals and groups concerned.

13 . . . . should provide fertile ground for leadership qualities to be realized.

14 . . . . should provide and encourage democratic leadership instead of autocratic domination.

15 . . . . should provide the participants with opportunity for relaxation and socialization, which in itself is instrumental to growth.

SUMMARY

In considering questions concerning the various aspects of an in-service education program for distributive education, I have attempted to present some generalizations that may prove helpful in determining specific answers as these problems are considered in individual states. Some guiding principles were suggested for your consideration and reaction. These principles might be grouped around the following major premises:

1. The program will be designed in terms of the needs and desires of the teacher-coordinator.
2. The program will be co-operatively planned and executed.
3. The program will be comprehensive.
4. The program will stimulate experimentation.
5. The program will be continuously evaluated.

How can these goals be accomplished? I would like to submit a statement made by a local superintendent of schools to a group of beginning teachers as a reflection of my personal belief: "If something is educationally desirable, it is educationally possible." If you believe in-service education is desirable, you will find a way to accomplish its purposes.

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3. ______________, and John A. Beaumont. Guidelines for Teacher Education Programs in Distributive Education. U.S. Department of Health, Education, and Welfare. Washington: Government Printing Office, 1962.

4. Ogletree, James R. Person-Centered In-Service Education, Bulletin of the Bureau of School Service, Vol. XXX, No. 1. Lexington: University of Kentucky, September, 1957.

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The Role of The Teacher Educator In Research and Materials Development*

The task assumed in this paper is best described as one of jogging and vitalizing our thinking. It is so easy when one is preoccupied with the basic pressures of the job to push aside all the words one has read about innovation in education. Even such knowledge as one has managed to master tends to be conveniently abstract. What we need to do is force ourselves to get down to the facts of the matter. We need to look beyond our teacher education programs at those students who will be whirled into our project plan classes like so many leaves in a storm. We must also examine DE students as they leave our programs and are thrust into the business world with the stamp of Distributive Education on their application blanks--to face the reality of making a living in a world where the employer seldom displays the interest of a guidance counselor. We must determine the role of distributive teacher education in implementing or impeding innovations which are suggested by federal planning and leadership.

TEACHER EDUCATORS CONTROL THE FUTURE OF RESEARCH AND MATERIALS DEVELOPMENT

The decisions concerning what is to be accomplished in research and curriculum development lie primarily in the hands of teacher educators. Publishers and teachers look to us in higher education for direction.

Our concept of the project method can form the backdrop for its use throughout the country. If we are convinced that this method equips us to meet a wider range of needs; that it can strengthen the teaching-learning process in the school setting; that it permits the coordinator to control more carefully the use of resource people and experiences in the business community, then our stamp of approval on the method will influence others.

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* Prepared by Mrs. Vivien King Ely, Assistant Professor of Distributive Education, Richmond Professional Institute, Richmond, Virginia, for the 1967 National Seminar in Distributive Teacher Education.

We need, then, vision and purpose--in research and in materials development. If we believe that the purpose of education is to make a man feel at home in his universe, then those whom we teach and influence are likely to accept this as their belief.

DISTRIBUTIVE EDUCATION NEEDS TO BE IMPROVED

CURRENT APPRAISAL

A current appraisal reveals a number of recognized weaknesses:

1. The materials which our coordinators use in teaching do not always take into account the current characteristics of distribution.
2. We do not use especially skillful methods in determining the extent and nature of students' learning.
3. We need help in determining our students' learning potential.
4. We find ourselves offering distributive training, more often than not, and thus subjecting learners to experiences in which the aim is to have them reproduce experiences or master skills, rather than offering distributive education in which we present part of the information and ask the learner to figure out the rest; in which the aim is to require the student to learn more than the model exemplifies; in which the aim is to add the learner's creative talent to that which is taught by the coordinator.
5. We are not certain how to adapt our courses to different occupational emphases and time requirements, to students with varying backgrounds and goals.
6. Much experimentation and research, especially with techniques other than the questionnaire survey, are needed in relation to all aspects of our teacher education programs and to distributive education in general.
7. The values which we ascribe to most component parts and methods which we use in pre-service programs rest on questionable theoretical foundations. Experimental evidence is needed if a sound base for teacher education is to be established.
8. Curriculum research in distributive education is just beginning. Meyer and Logan[1] focused

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[1] Warren G. Meyer and William Logan, unpublished report. "Review and Synthesis of Distributive Education Research," 1966.

attention on a crucial aspect of our research efforts in the past. Our studies have been primarily descriptive in nature, with very little experimental curriculum research having been undertaken.

9. At this point, there is an absence of any clear, conceptual framework to provide the necessary guidelines for the conduct of curriculum research.
10. Narrowness of focus in most completed research studies means that transfer value or applicability in other situations is seriously reduced. The pressures for publication and time-limited grants have given rise to a vast array of "little" studies. Such studies as two-minute exercises or brief verbal responses are not likely to help us much in attempting to improve curriculum practices and methodology.

The fact that we are faced with problems in curriculum development and research is not unique. This whole area of curriculum innovation, notable for its neglect since the 1930's, has been coming to life again. Many areas of public education are wrestling with unsolved problems.

THE NEED TO FACE CHANGING CONCEPTS IN VOCATIONAL EDUCATION

Howard W. Johnson,[2] President of M.I.T., in a recent address said that nobody disputes the value of technology;

> . . . but quite often it has operated without the long-range vision necessary to provide a total atmosphere conducive to man's development. Today a specialist whose interests are limited to the narrow definition of his field is not the best person to guide the progress of our society. We need people who, in Norbert Weiner's words, have the one quality more important than 'know-how'. This is 'know-what' by which we determine not only how to accomplish our purposes, but what our purposes are to be.
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> It seems to me, that we always run the risk of assuming that other countries will look to us only in terms of our great and growing GNP. . . . But if we can create a new and higher quality of daily living . . . we will have succeeded in making this country a more interesting model for others to examine.

It is refreshing to be reminded of the ideals which lie beyond our GNP, and especially from a prominent spokesman for the field of technology.

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[2] Howard W. Johnson. "Technological Know-How Plus Know-What." Speech before a group of electrical and electronics engineers at Massachusetts Institute of Technology, Boston, Massachusetts. 1967.

Conflicting ideas are stimulating. Rather than becoming disturbed by the disagreement existing today among distributive educators, we should find that conflicting ideas are keeping our field in healthy agitation. New insights can produce new and useful techniques.

Focus on major problems. We need, however, to focus our attention on several major problems or questions confronting us today -- questions in relation to the subject of materials development -- down to earth, everyday, bread-and-butter questions such as these:

1. What changes in student behavior are desirable? How can they be measured? There is an axiom which asks, "Pray, what do you want the student to do after he's seen the last of you?"
2. How can we give slow learners a chance for recognition and advancement without losing the interest of the more able students who are being held back by the slower progress of others?
3. Is it possible to offer each student the opportunity to learn in ratio to his ability, without the frustration of group learning situations?
4. Is involvement in the research process itself an effective way to bring about curriculum change?
5. Who should initiate such change?

OUR CURRICULUM PROBLEMS CAN BE SOLVED

USOE PLAN

The U.S. Office of Education has suggested a plan for curriculum change which wears well with study.[3] If you have had the opportunity to study and re-study the discussion guide, you have no doubt discovered that the concept includes an analysis of the competencies which distributive education should develop and identifies the areas of knowledge which compose our field of study. It is a sound approach to a framework for curriculum innovation in our field.

ALTERNATE TO USOE PLAN

But if we should reject this plan what would be the alternative? If we are convinced that our curriculum does need a closer adaptation to the field of distribution and a closer alliance to expected outcomes for learners, what other approaches might we consider?

The inversion plan, a common procedure in curriculum research, would reject starting with a general design. This plan would allow innovation to start at the local teaching level with the planning of specific teaching-learning units. The results of experimentation at this level then would provide the basis for a general design during the latter phase of the total research process. This can be a sound procedure, but it is a slow one. A question which comes to mind in considering this type of inductive research is: Can we wait long enough for innovation to move from the classroom into a general design? How long would it take? How certain would we be that we have developed a workable design, suitable for general application?

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[3] Office of Education, U.S. Department of Health, Education, and Welfare, Washington, D.C.: Unpublished guide, "Distributive Education in the High School," 1965.

NEED FOR CURRICULUM PHILOSOPHY

We have not yet formed the habit of stating curriculum objectives in behavioral terms. After we have become convinced that our materials should produce learners who can perform in specific occupational areas, then we need to move forward into a planned program of curriculum research in which we carefully evaluate innovation, analyze procedures and offer useful strategies for implementing processes.

We have a suggested framework for curriculum change. It is the suggestion of the writer that we tentatively accept it and the philosophy which it represents. From there, we can proceed to look at the role of teacher education in implementing those innovations, testing them and accepting those which prove to be sound. The evaluation or devaluation of curricula requires the validation or invalidation of theory, and is not determined by philosophical dispute.

A new and promising area of curriculum research appears to have been opened. But in order for educational research to qualify as research, it requires that a theory be either accepted or refuted. Let us make a mighty reach and assume the lead in innovation and testing for education in the discipline of marketing.

TEACHER EDUCATORS SHOULD ASSUME INITIATIVE IN MANAGING CHANGE

IN RESEARCH PROJECT MANAGEMENT

Since a vital element of change is sound research and evaluation procedure, it falls upon the teacher education staff in DE to manage research efforts in this direction. When we remind ourselves that change involves people, we realize that we must assume the task of helping administrators, present teaching staff and future coordinators to understand the rationale for change. It should be our desire to develop a healthy concept toward innovation.

Unfortunately, when academicians in the subject matter fields become aware of the need for curriculum change, they hurriedly develop a wide variety of programs and materials; and the federal government has spent millions of dollars in implementing these in the public schools without any orderly and systematic procedures for evaluation. The recent growth of federal planning and leadership should not cause us to rush haphazardly into research projects. We should move slowly in order to make certain that the public and the Congress will not have opportunity in the future to be critical of the questionable value of research projects for which grants are approved. The time will come when a closer look will be taken at the disbursement of federal funds for research; let us test each plan for study in terms of such scrutiny. Let us make certain that the research which we sanction qualifies as necessary spending at a time when governmental costs are soaring.

Need for research pattern. If it is our desire to facilitate research project management, then we should be concerned that a research plan for distributive education be developed. Such a pattern should include criteria for evaluation and selection of projects related to distributive education goals, and should identify priorities for money, manpower and facilities. The plan should provide criteria for estimating potential returns and lay out the pathway for our future research efforts.

Need for communication regarding research. It should be our concern also to facilitate communication regarding research in our field, to inform our colleagues of progress and potential problems, to motivate, and to promote enthusiasm, understanding and support.

Need for dissemination of research findings. In the area of research project management we should consider our role in facilitating the dissemination of research findings. The establishment of the Educational Research Information Center at Ohio State University is a step forward, but the information concerning research studies which we receive from The Center will reflect our diligence in seeing that all worthwhile studies are abstracted and reported for input at The Center.

We also need state and regional experiment centers, staffed and in geographical proximity to make them accessible. Curriculum change should not be made in a vacuum, and if we are to move into this area of research, then we must have access to facilities and qualified staff which can carry out curriculum experimentation in our DE classrooms.

Brickell and Clark [4] call for some kind of dissemination service or agency that would function in a manner comparable to the county agent in agriculture, to help teachers and administrators relate the best research results available to the local school situation.

Practical research problems need attention. Perhaps the immediate task for some might be to tackle those practical problems in research which Vivian[5] lists, and which were suggested by Marks[6] in 1963. The challenges facing distributive teacher educators were listed as these:

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[4] Henry M. Brickell. Organizing New York State for Educational Change. Albany: New York State Department of Education.

David L. Clark: "Educational Research: A National Perspective." Educational Research: New Perspectives (Edited by Jack A. Culbertson and Stephen P. Hensley.) Danville, Illinois: Interstate Printers and Publishers. 1963.

[5] Neal E. Vivian. "Forward with 50 Years of Experience in Distributive Education." American Vocational Journal. Vol.42, No.3. Washington, D.C. March, 1967.

[6] Mary V. Marks. Paper presented to National Distributive Education Clinic, Washington, D.C., 1963.

1. Reseaech regarding the type, quality and length of occupational experience needed by teachers. Crawford's[7] study falls into this category.
2. Experimental and pilot programs to provide and update such occupational experience. Meyer's[8] research can be classified in this area.
3. Exploration of new and different methods of providing for the technical content of distribution.
4. The initiation of new programs of institutional teacher training. Purvis and Wolf, and Samson have completed studies in this area.[9]
5. An action program to identify and train teacher educators.
6. Role clarification (responsibilities of teacher educators.)
7. Recruitment of potential teachers among graduates of high school and post-secondary DE programs.
8. More emphasis on preservice and inservice teacher education for adult instructors.
9. Increased attention to the recruiting and preparation of teachers of youth with special needs.

These problems do indeed need investigation and it is encouraging to know that studies are being completed in some of the areas, but they are not primarily concerned with curriculum innovation research which is the major emphasis of this paper.

IN DEVELOPING A CURRICULUM PHILOSOPHY

This new and promising area of curriculum innovation requires that we understand and, in turn, teach others what we in distributive education are trying to accomplish in our classrooms. Who is the student whom we teach? How can we expect him to profit from the project plan of instruction?

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[7] Lucy C. Crawford. "A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education." Blacksburg: Virginia Polytechnic Institute. Research study scheduled for completion December, 1967.

[8] Warren G. Meyer. "Pilot Training Projects Based on Directed Occupational Experiences for Teachers of Distribution and Marketing." Minneapolis: University of Minnesota. Research study scheduled for completion April, 1967.

[9] A. W. Purvis and W. C. Wolf. "The Development of a Regional Teacher Education Program for the Field of Distribution and Marketing." Amherst: University of Massachusetts, 1966.

Harland E. Samson. "An Experimental Vocational Education Institute for the Preparation of Teacher Coordinators of Newly Emerging High School Vocational Programs." Madison: University of Wisconsin, 1966.

Learning from psychologists. In the University of Chicago's Urban Child Study Center, psychologists are learning facts which have some application to our students. They have discovered how home environment can stifle a child's chances in school.

> In describing what can be expected of learners, they indicate that the learner from a lower-class environment has been treated like a pet cat--a thing to have around--unworked. Their homes are classified by an attitude which says, "Go to school, shut up and stay out of trouble." Most middle-class children are treated like a new TV set, observes Howard's Jerome Kagan. "They're worked on. 'Let's make him a prince' is the idea."
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> "Learning is a social thing," says Dr. Kagan. " Attention, affection and rewards make for a good learning climate. But today everyone is told, "Go to school and be smart--learn the graphs and get the rewards for it in later life . . .' "
>
> A professor's child can be just as disadvantaged as the poorest slum child if no one takes an interest in him. A poor child can get a rich variety of knowledge if his parents have the time, know-how and concern to teach him. Berkeley's Jensen says, "It's what the parent does with the child."
>
> School may never have been anything more than a bewildering, humiliating nightmare. To overcome the deprivation of environment teachers may work in a "responsive environment" classroom. They can help the child to develop his senses and skills--and through these methods his self-esteem."[10]

Making application to DE. Studies such as the ones mentioned above are rife with meaning for us in distributive education. Many of our students are the victims of deprived environments--not necessarily financial deprivation--and the simulated work experiences in a meaningful project-plan DE classroom may perhaps be compared to the "responsive environment" classroom. Our project-plan experimentation should seek to discover meaningful ways in which our students can discover new things for themselves, each at his own pace.

Education's duty to supply employers with workers whose technical skills have been kept up to date in the face of rapid changes is often cited as we move into an automated world. Just as important is the quality of human beings the schools will be turning out in coming decades.

Learning from general educators. Perhaps the most comprehensive consideration of the job facing the schools is provided by eight western states.[11] The states of Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming are undertaking a project called "Designing Education for the Future."

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[10] "But Will Precocious Kids Grow Up to be Vipers?" Life, Vol. 62, No. 13, March, 1967.

One of the consortium's first results has been publication of a report, which is a collection of looks into the future by outstanding educational specialists from all sections of the nation.

In the report, Laurence D. Haskew, vice chancellor of the University of Texas, frets about the possibility that the individual human being may be at the mercy of social changes, but not understand what is going on.

> Two things are wrong with this picture. The individual resembles a puppet when he should resemble a playwright; thus, social change is king, man is subject. And in effect, man is an illiterate in a world which does not exist for him.
>
> Unleashing criticism at the schools is intentionally more harsh than the facts justify. Students in my hometown high schools know a great deal more about nuclear fusion than they know about the population explosion. They study communism but not urbanism.
>
> They project themselves backward into the Constitutional Convention but not forward into the future of Austin as a center for the convening of people to live together under conditions now unforeseen. They are involved in a vocational choice but seldom involved in choice of total style of life in view of what can be made to happen in society.
>
> Besides identifying the student with social change, prime objectives of education should be to help Tom Tucker construct for himself a "human, humanistic self." The humanities should be emphasized in the schools. In so doing the schools can be creators, not just the creatures of society.[12]

John I. Goodlad, professor of education at the University of California, Los Angeles, mentioned the same sort of problem. He said that a substantial portion of the curriculum "has not been justified on criteria other than habit or tradition," and he said, "this is particularly true in the social studies where too many insignificant historical events are learned by rote . . . and where a 'mankind' approach is largely lacking."[13]

In the schools of the 1970's and 1980's, Dr. Ralph W. Tyler, director of the Center for Advanced Study in the Behavioral Sciences at Stanford, predicted:

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[11] "Implications for Education of Prospective Changes in Society." A report of a consortium on "Designing Education for the Future" for eight western states. 1967.

[12] Ibid.

[13] Ibid.

> . . . much greater attention will be given to systematic inquiry in the social sciences. Many authorities have emphasized the need for a more realistic understanding of such developing social problems as urban and rural slums, depletion of natural resources, environmental pollutions, traffic congestion, crime and delinquency and civil rights.
>
> They also have stressed the need for dispelling the myths and misunderstanding about our political, economic and social systems and for developing more adequate ability to examine the issues and appraise the promise of proposed solutions. These objectives call for a massive reconstruction of the courses in social studies and social sciences.[14]

In essence, the points raised by these eminent educators call for "issues" courses in American schools, in which students would look at least as much at the present and the future as the past. In addition, courses enabling students to gain human values and appreciation of other cultures will be crucial.

Making application to DE. What is our first reaction to recommendations such as these? Are we inclined to say that we are engaged in education for making a living and not for making a life? The writer does not mean to imply that distributive education is the answer to most of the suggestions of these education authorities, but those concepts, qualities and abilities which we can teach are interwoven throughout the above suggestions. In light of this fact, we have contributions to make to curriculum studies in other educational areas and we need to be aware of the thinking of generalists in education in order to adapt those of their findings which are appropriate to vocational education.

We should resist suggesting that administrators make wholesale curriculum changes without regard for teacher preparation or for possible student effects. Changes should not be made for the sake of change nor to increase enrollment. Teacher educators will recognize the need for changes in methods of teaching, instructional materials and procedures which must accompany innovation.

A forward step in the establishment of a research pattern in distributive education might be to include specialists from other disciplines such as psychology, sociology, and anthropology who could offer counsel in the planning of necessary curriculum research and innovation in our field. A reference related to this suggestion was made in Richmond this past March by a speaker at a conference on educational innovation. Dr. Willard Goslin,[15] professor emeritus at Peabody College for Teachers in Nashville, said that state departments of education should have such specialists as psychologists, social scientists, geneticists and anthropologists on their staffs to help plan school courses. "These departments are where the leadership for school changes ought to come," he said, "but instead, they are bogged down in political machinery."

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[14] Ibid.

[15] Dr. Willard Goslin. "The Need for Innovating." A speech delivered at a Conference for "Some Educational Innovations--Present and Projected," Sponsored by the Virginia Education Association in Richmond, March, 1967.

IN ESTABLISHING CURRICULUM STANDARDS

This writer believes that it is from distributive teacher educators that implementation of curriculum innovation in our field ought to come. As innovation becomes a reality, it will be up to us to establish curriculum standards for the future. Because of the projected increases in enrollment which the project plan will produce, we now find publishers begging us to prepare teaching materials for publication. If we are committed to a sound philosophy of curriculum, we can offer the necessary guidelines to these publishers as they begin to provide those materials which we so desperately need.

Some of the standards for instructional materials worthy of our consideration include:

1. Teaching materials should be developed only after we know what we expect of the learner in terms of actual behavior.
2. These materials should provide for a consistent yardstick for measuring student development. Materials should lead the student from the association level of learning, at which he copies or follows on a step-by-step basis, to the conceptualization level where he grasps whole ideas, and finally to the creative self-expression level, where his original ideas are expressed.
3. New materials should provide the learner with a means for obtaining immediate knowledge of success or failure.
4. Curriculum materials should provide a student adjunct program with questions for reasoning, evaluation and creativity; with projects which simulate on-the-job activity; with opportunity for the student to develop his communication skills; with sufficient evaluation guides for the learner to show progress or need for further development.

IN IMPROVING TEACHER EDUCATION PROGRAMS

As we assume our natural roles in research and materials development for our high school and post-secondary programs we should not overlook the need for improvement in our teacher education programs themselves:

1. Perhaps our most pressing need is to help future and present coordinators establish a criterion of occupational relevance for selection of curriculum content. We need to help them determine what knowledge is of worth to our students as they prepare for occupational

proficiency. We realize that responsibility for the final selection of curriculum materials lies with the teacher, but the coordinators' exposure to teacher educators should have helped them develop the ability to make such selections wisely.

2. It should be our goal to help each coordinator-in-training recognize the individual and social values implied in the learning process, and to help him recognize his role as an educational specialist in the marketing community.
3. We should attempt to establish a theory of curriculum planning and development which the local teacher-coordinator can accept. Our most creative ideas come from coordinators, but they must understand the curriculum framework and subscribe to the general philosophy in order to make their maximum contribution to further research and development.
4. We can help coordinators organize their knowledge and skills for teaching. Our influence will be far-reaching as we help future and present teachers understand curiosity and involvement as vehicles for learning.
5. We should be conscious of the contribution which current research will make to the improvement of teacher education and be able to recognize the need for other specific research studies to undergird our theories and practices. Mrs. Crawford's[16] study to determine the professional and technical competencies required for an individual to become an effective DE coordinator will become a basic tool for improving existing teacher education programs and should serve as a guide in the establishment of future pre-service programs.
6. There will be a continuing need for studies to be undertaken in school situations where curriculum change is underway. The teacher educator should be a vital part of the planning of such research studies.
7. We should make every effort to convince college administrators that we need to concentrate on expected outcomes for future teachers through a wider use of such modern methods as video tape recording and micro-teaching. Such methods as these actually provide simulated on-the-job experiences for future teachers.
8. We need to develop graduate courses which include measurement and experimental design so that the local coordinator has the opportunity to learn how to conduct curriculum research.
9. Most critical among the research needs in our field of higher education is experimentation with five-year comprehensive programs. Satisfactory evidence is needed to determine the strengths and

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[16] Crawford, op. cit.

> weaknesses of our institutions in achieving the goals in each of the three aspects of teacher education--general education, field of specialization, and professional education. The findings of such research is required to guide changes in organization and programs.

This paper poses only a few tentative answers to the challenge facing distributive teacher education in the areas of research and materials development. It is intended to challenge us to consider what the consequences of poor teaching can be and the role of distributive teacher educators in approaching educational innovation.

Our curricula are in various states of transition from yesterday's practices to tomorrow's expectancies. Perhaps it would be accurate to define all education as a number of systems in transitional states. The student is in transition from childhood to adulthood. His learning abilities are in various stages of maturity and immaturity. His social attitudes and personal characteristics show day-to-day fluctuations as well as progressive developmental states. Adolescents and youth are in a transitional state in terms of their vocational aspirations. It is not unusual, therefore, that our DE curricula should be in a state of transition. Teacher educators should accept the challenges which these transitional situations produce. Once we determine our role, the answers will begin to appear.

Teacher Behavior and Teacher Education*

Not only does professional agreement hold that teaching can be taught, but the teacher education sector of the profession argues that teaching can be made even more effective than at present. The task of a professor of education is two-fold: to provide experiences which will enable his students to develop the appropriate behaviors of teaching, and to work toward the improvement of teaching itself.

But these responsibilities are not exclusive to the professor of education. In the period since 1950, two notable developments have changed the face of teacher education: multi-disciplinary involvement and commitment to the preparation of teachers, and equally important, vastly increased participation of public-school personnel in the clinical phases of teacher education.

Within the profession our roles are different; some of us are classroom teachers; others are administrators of educational programs, some teach pre-professional courses for the newcomers to teaching, and some are behavioral scientists concerned about the potential impact of basic research upon the practice of teaching. A common purpose unites us: improvement of teaching. How very important it is for us to develop ways to identify the contributions each can make to the common purpose!

If we accept the common purpose, improving teaching, and adopt as our major strategy the improvement of teacher education, we next must agree upon some sources from which we will seek data about needed improvement. Several sources readily come to mind: perhaps the most glamorous is the "new technology" which has already stimulated much speculation about what schools could look like in ten or twenty years. Innovations made possible by technology often open the door to new ways to do things more effectively or more efficiently; indeed, if properly evaluated and properly examined in the light of all that is important in an instructional system, these can often provide significant sources for improvement. But herein lies the inherent danger of bandwagons: an enthusiasm for "things" which goes beyond any real merit. A new gadget or a clever strategy can find ready reception in today's school, more often through a desperate adoption than through thoughtful design. Adoption of an innovation based upon anything less than a thorough system analysis is rarely productive; it leads to inclusion of a new "thing" which will ultimately be rejected because of its incompatibility with the rest of the system. Thus, we commonly have pendulum swings and frustration.

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* Prepared. by Ted Ward, Director of the Learning Systems Institute at Michigan State University for the 1967 Seminar in Distributive Teacher Education

A second rich source of cues for improvement of teaching lies in careful analysis of the national condition. Here we inquire into the needs of society which can be met through improvements in curriculum and teaching. This is our business; education should be constantly taking stock of the national condition, asking what can be done in response to changes of the ethical structure and shifts in values and purposes. This we must each do, recognizing that the contribution of public education in the United States is dependent, in the final analysis, upon that individual cell--the classroom--and the nucleus of that cell, the classroom teacher. In truth, there is no way for the blame to be passed beyond the practitioner. When the school fails to respond to a community's needs, it makes no sense for teachers and administrators to blame each other nor for practitioners to vilify teacher education; we all are in the game together.

Continuing the search for data sources about needed change, and limiting the search to the area of teacher education, there is a promising third source which lies before us in an underdeveloped form: consumer evaluation. There are two major senses in which teacher education deals in consumer commodities; first, the teacher-in-training is a "consumer" of the educational experiences of the teacher education program, and second, the school administrators and professional colleagues of a newly-hired teacher are "consumers" of the human output of the teacher education establishment. We should listen closely to what these consumers are saying about our products. Perhaps we won't like what we hear, but we should be willing to listen and learn. In the absence of better data, we can treat the complaints which constitute the day-to-day counseling problems as informal feedback. From this readily available source I have noted two major criticisms of the pre-clinical courses: Lack of reality and lack of definiteness.

The student often tells us that his pre-clinical courses lack a sense of immediacy and reality. He wonders if what he is expected to learn is really giving a true picture of teaching. He seems unconvinced that there is anything he can learn in these courses which will make much difference in his future as a teacher. And he hears other people, even respected professors and school teachers, reinforce his suspicion. He begins to suspect that there are people in the teacher education program who have been passed over by progress--people whose concepts about what teaching is all about, what the schools are like, and what children are like, are concepts from yesterday.

And what about relevance? Do our students learn the knowledge and skills they will actually need? How well does the teacher education program agree with what the student finds when he gets into his own first teaching position? We sometimes hear the criticism that what comes before the student teaching or internship has little apparent relationship to the demands of real classroom teaching. Many students report that the pre-student teaching work doesn't have the kind of relevance that would make the most sense. Some find that teaching doesn't look like they thought it would look. Part of this problem is related to the fact that a student has a notion of teaching largely produced by his own past experience as a learner, through long years of elementary, secondary and college education. We lack imaginative ways to help him make the shift from student to teacher.

The lack of definiteness is even more difficult to cope with. Experienced teachers know full well that few magic formulas exist. Teaching requires a quick-thinking, imaginative response to a kaleidescopic array of problems and needs. There is truth in our complaint that every situation is different. So we might want to shrug off the criticism of fuzziness in teacher education--we are tempted to argue that it must be indefinite and vague. But these criticisms are too common to be overlooked, too consistent to be discounted. We must learn to say, "all right, assuming the criticism is correct, what does it suggest about needed improvement?" Otherwise, we will explain away our best data. Why don't students sense the reality of teaching from our work with them? Do we keep them too innocent of the reality? Do we deceive ourselves with pretty pictures of what the school ought to be? Are we trying to make our students able to go out to reform teaching--to vicariously satisfy our own needs and compulsions?

Now we will try to turn these cues into constructive propositions. There is a promising future for teacher education. Behavioral science is coming of age, and we are recognizing that education can be based upon behavioral science. The research-to-practice gap in education is real enough, but there are some useful plans being developed to bridge it.

For example, behavioral research in the problems of human learning and in the practice of instruction is a rapidly expanding field. Clinical studies of learning and teaching can be carried on as a fundamental part of the environment in which teachers receive their practical training. Such clinical research is much less threatening to practitioners than abstract and remote laboratory research. In the first place, it concerns itself with the very problems which practitioners identify; further, it begins with descriptions in the real environments, not just in the highly-controlled and contrived environments of the laboratory. Like teaching itself clinical research faces up to the ever-present problem of complexity--solutions are rarely generalizable without many provisions about the wide array of confounding variables. But behavioral research can help to bridge the research-to-practice gap because it acknowledges the proposition that what experience has taught practitioners is worth knowing.

There is plenty that is right about teaching today; plenty to build upon. Alert practitioners who grow along with the demands of their duties are a powerful resource. We do well to build teacher education programs upon the models of excellent teaching which exist in a large number of public school classrooms.

The college or university which provides a realistic student teaching experience in public school classrooms is taking the first step toward answering the "reality" criticism. But to solve the "definiteness" problem, research must be called in. Few careful studies of the behaviors of competent teaching exist. There has been a steady flow of interesting research on teacher attitudes, teacher personality and similar psychological investigations of teachers and learners; but descriptive pictures of what good teachers do in particular settings are extremely scarce. At MSU we have begun a series of clinical studies in an attempt to get useful descriptions of what our highly competent supervising teachers and intern consultants hold before students as behavior models. Attitudes and personalities are important, for sure, but these attributes of our students are almost unchangeable in the relatively short times we have to work with them. But role perceptions do shift, behavior styles and actions are picked up from the models which are provided. It is especially clear that the supervising teacher in the student teaching experience is a powerful behavior model. We desperately need clinical research to give us a better picture of what these behavior models look like; we then can provide materials and experiences in the pre-clinical phases of teacher education which will communicate these models more rapidly to the teacher-in-training. We expect this approach to provide a definiteness which seems now to be lacking. Teacher education can become a set of experiences which enable the student to begin to operate within the framework of the best teaching models we can find in real practice.

To raise the quality of teaching beyond the best current models another function of behavioral research is useful: instructional behaviors can be traced to their roots in the teacher's thinking in order to determine what hunches or hypotheses the teacher is operating from. This information, since it can be highly specific and of the order of small units of data, can be checked against the bits and pieces of research data in human learning and social psychology. Thus, it is possible to assess the agreement between practitioner's hypotheses and outside research evidence. Recent work with this problem in the MSU clinical studies has revealed a relatively small number of discrepancies between research findings and good teaching practices. We are asking our teachers and supervisors to take a look at these, to decide whether they can make experimental changes of these points in their practice, and to let us know what differences these precise alterations make in the consequences of their instructional acts. This is, we believe a realistic, yet hopeful, way to build upon the best that teaching now is and to raise the ceiling by making careful links between clinical studies and laboratory studies--using the research from outside the practice arena to pin-point possible improvements in the practice.

It has been said that the most important mistake in teacher education is giving fine answers to questions students don't yet have. There's important truth here; until an education student begins to think of himself as a teacher, it is hard for him to learn much about teaching. He is much too busy continuing his identification as a student. Part of the answer is to be found in earlier contact with pupils in a teacher-related role; observing from the rear of a classroom doesn't do much for role development. Another solution is being sought in an experimental program undertaken recently by the Learning Systems Institute and the School of Teacher Education. We have reduced teacher behavior to its most simple element: instructional decision-making. And now we are inventing ways to confront students with small-scale instructional decisions, in order to give them practice in thinking as a teacher must. If the student can learn to seek and select environmental data and to base his instructional decisions on the important characteristics of the problem situation, he will develop a versatile and useful teaching skill. He will begin to adopt a systematic habit of using observations about what is in planning his teaching moves and evaluating the outcomes of his actions. Thus, he can profit from success and failure. Existing possibilities of the use of powerful simulators and other high-efficiency methods are opened up to us once we commit ourselves to a crisp definition of the basic behaviors we want in professional practice.

In order to use high-efficiency methods, learning tasks must be highly specified. A behavioral theory of teaching can generate suitable specifics. It is useful to think of the teacher as a data processor--receiving information from the immediate environment which is to be processed within the framework of the stored data about objectives, procedural intentions, content to be communicated, etc. It is reasonable to suggest that teaching the rudiments of this particular behavioral style is preferable to a teacher education which attempts to teach a pedagogy of precepts.

We need to develop in teachers not so much a knowledge of all there is to know about learning, for this is clearly impossible, but a systematic habit of basing instructional decisions upon whatever relevant data is available in the immediate environment of the classroom. Methodology can be thought of as a process in which the teacher seeks cues from the dynamics of the classroom moment, combines these cues with the aspirations and objectives he has for the learners (using his own hypothesis about learning), makes a "move", evaluates the consequences of the move and the hypothesis on which he acted, in order to be able to make a better prediction next time. Complicated though this may sound in verbal description, the human mind is capable of carrying on far more difficult cyclical processes than this one. Development of the habits of making appropriate observations, diagnoses, predictions and evaluations must be a major objective of professional training. Once established, such mental routines should provide a highly flexible format for the teacher as he enters a career loaded with new and unpredictable demands.

TEACHER BEHAVIOR RESEARCH -- ONE ILLUSTRATION

Understanding the contributions and promise of clinical studies starts with a perception of clinical studies as research. Since such a perception must be built on specific illustrations, I will direct attention to the clinical studies with which I am most familiar -- those which the Learning Systems Institute has designed and managed for Michigan State University's School of Teacher Education. This will highlight a number of the key elements of clinical research, particularly the following: (a) location of the data gathering in real instructional settings, (b) behavioral description of the teachers' activities within particular settings and in the course of striving for various learning objectives, (c) comparisons of data from several instructional settings in order to identify common elements and peculiar elements in sets of instructional behaviors, and (d) examination of behavioral descriptions (and the instructional hypotheses which they reflect) in the light of given bodies of outside research.

OBSERVING TEACHING

The clinical research studies to date have used decision making as the focal point for data gathering. The focus on decision making provides a means for "getting at" the various origins of the teaching behavior described. The series of studies the Institute has conducted since 1963 has refined a procedure for using the observer's judgment of an apparent decision-making function of the teacher as a focus for descriptive observation.

The studies in this series have served two purposes: to derive instructional materials for preclinical teacher education courses, and to provide descriptive data on the models of teaching which operate in our various clinical centers. The Focused Observation routine which has been developed for these studies uses observer data and self-report data from the teacher to investigate a particular act (as a product of some decision-making function) as it relates to: (a) what the teacher *sees* (perceives in the situation, (b) what he *knows* (information which he relates to the situation), and (c) what he *believes* (values which direct the particular action). Descriptions of the decisions teachers make in an instructional setting have been found to provide a useful focal point for behavioral description.

A second reason for the selection of decision making as the unit of behavior to be studied is that it allows a broad range of behaviors to be described. Rather than focusing on a limited facet, (e.g., the communicative interaction between teacher and students) activities of a wide and varied nature, even those which seem trite and perhaps inconsequential, can be taken into account. The following lists illustrate that the instructional function of the teacher, when viewed as an information system involves behavior activities which require continuous decision making.

INPUT	PROCESSING	OUTPUT
Watching	Selecting	Motivating
Listening	Planning	Managing
Reading	Evaluating	Leading
		Directing
		Coordinating
		Providing
		Telling

Third, there is a practical advantage in studying small units of behavior, as is possible through the focus on decision making: the immense scope of teaching behaviors presents frustrations to those who would seek universal generalizations. The possibility of analyzing small samples of behavior and of generating partial models allows some useful products to be derived long before the completion of exhaustive descriptions of teacher behavior. In fact, it can be argued reasonably that exhaustive descriptions and universal statements here are impossible.

Still another reason for focus on decision making within the instructional context is that this allows for descriptions that can ultimately take into account the pragmatic method of decision theory as described by Bross.[1] This method includes: (a) descriptions of a problem environment, (b) a set of actions, (c) a set of outcomes associated with the actions, (d) a set of probabilities associated with the outcomes of the actions, and (e) the desirability of the outcomes.

Finally, the focus on decision making as the unit of behavior has been found to provide an effective means to procure behavioral description of the small and discrete elements of which larger descriptions, even models representing "styles" of teaching, are composed.

In the particular Focused Observation procedure used most extensively so far, the descriptions include three basic segments: (a) *situation* -- a description of the relevant elements in the immediate environment, (b) action -- an account of the particular teacher behavior cited as an action based on an apparent decision, and (c) consequence -- a description of the consequences of the action in terms of the immediate environment. After the observer writes these materials, the teacher is asked independently to verify what was seen and reported by the observer and to make any relevant additions he feels are important. In some cases, this interview is tape recorded. If there is fundamental disagreement between the observer and the teacher as to what occurred, the observation data are regarded as unreliable.

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[1] I. Bross. *Design for Decision*. New York: Macmillan Company, 1963.

Both observer data and self-reported data are necessary. First, data that have been reported only by an observer or a teacher are less reliable than data obtained independently from both sources and then compared for consistency. Second, the adequate analysis of the situation and consequences usually depends upon data not available to the observer. In addition, the self-reported data and the way in which the teacher responds to inquiry are necessary in order to assess rationality.

Assessment of the rationality in teacher actions is one of the important problems in the present clinical studies. The Focused Observation procedure assumes that a degree of rationality exists in the sort of teacher action which the observer can describe as following relevant environmental cues. Indeed, much of the usefulness of the procedure is based upon the assumption that the instructional decision is a focal point revealing, in behavioral terms, what the teacher knows, sees and believes.

COMPILING MODELS

In the clinical studies at Michigan State University, models of teacher behavior are constructed from the collected descriptions of teacher behavior. The term "model" has been associated with educational theorizing for more than a decade. It can be said that the models derived in the clinical studies are empirical characterization models. They are intended, however, for both purposes -- as models of teacher behavior (as in behavioral descriptions) and, after certain comparisons and modifications, as models for teacher behavior (as in theory building).

The particular set of teachers whose instructional behaviors are to be modeled are known as a "referent group". Such a group is convened to review the collection of some 200-250 descriptions of instructional decisions which were made in their own classrooms. They are asked to select those descriptions from the data pool which reflect behaviors they are presently encouraging in their interns. A statistically reliable positive agreement of the referent group is required on two questions in order to qualify a description for inclusion in the model being compiled. The two questions are: (a) Is the description adequate to provide a useful mental picture of the situation? and (b) Is the teacher action (or non-action) appropriate as you see "good teaching"? A third judgment concerns a rating of the representativeness of the occurence of the described situation in classroom teaching at this level.

These three judgments are made independently by all members of a referent group. After those descriptions which are rejected by more than 20 per cent of the group (on the first two questions) have been removed from consideration, the remainder are categorized and become the model for that group.

The referent group is asked, as a final step, to arrive at an acceptable statement of an operating hypothesis which adequately expresses the basis for each behavior in the model.

After final edition and hypothesis verification, the result is a collection of about 125 to 200 behavioral descriptions, organized in terms of the particular instructional problem to which each description relates.

COMPARISONS AMONG MODELS

One of the more immediately interesting outcomes of these studies is the capability of comparing models of instructional behavior as it exists in differing situations. Our analyses of such comparisons are just beginning now, and, as yet, there are no data to report. We have just completed a study of highly competent "center-city" elementary teachers in Detroit, Grand Rapids, and Flint. The descriptions in the model from this referent group were compared with the models derived from three other groups of outstanding elementary teachers (whose teaching assignments are not in "center-city"). Thus, we identified certain behavioral differences which distinguish the successful teachers in the urban center from the successful teachers in more ordinary locations.

The analysis procedure consists of four steps: (a) inspecting two or three models to identify behaviors which are common to both, and which are peculiar to each; (b) verifying the inspections by reconvening the referent groups to consider whether behaviors which are not found in their respective models are a result of chance or of real exclusion; (c) adding into each model those descriptions which each referent group agrees also properly belong within their behavior model; and (d) re-inspecting the models for common and peculiar behaviors.

The procedure can be described as a comparison of intersecting sets where the identification of elements common to two sets must take into account the likelihood that elements which appear to be exclusive in one set may be a product of chance.

The fruitfulness of this kind of comparison activity will enable us to determine the usefulness of this sort of model derivation as a research tool. At the same time, it provides for increased focus and relevance of selection of training experiences as we prepare teachers for the particular tasks toward which they are aspiring.

Other comparisons that can be made in further studies would include:

1. Models of teacher behavior derived from middle-class neighborhoods compared with those derived from culturally-deprived neighborhoods.

2. Statements about teacher role and behavior which students encounter in preclinical coursework in education compared with models encountered in field experiences.

3. Models of teacher behavior in elementary teaching compared with models of secondary teaching.

4. Models of teacher behavior in selected fields of special education teaching compared with models of elementary and secondary teaching.

5. Comparisons of models of behavior operating in various secondary school subjects.
6. Models based on different concepts of "good" and "bad" teaching.

Such studies could be of significant help in providing for teacher education more precise definitions upon which to base the crucial distinctions between "general" and "special" in educational methods.

SUMMARY OF THE RESEARCH CONTRIBUTIONS OF THE CLINICAL STUDIES

There are three groups of outcomes toward which our clinical studies have been moving. The first group is concerned with refined procedural techniques for documenting, analyzing and compiling teacher behavior samples. The second group accompanies the first as a contribution to educational theory: a set of statements concerning the function of general and special behaviors as they can be shown to relate to particular elements of environment or learner characteristics. The third class of outcomes is the most promising: the merger of data from behavioral studies in education with precise outcome statements from "outside" research on human learning. This may prove to be a useful new approach to bridging the gap between research and practice in education, first, in the sense of more adequate use of research by the education profession and, second, in the sense of stimulating new research which will focus more adequately on basic problems of educational practice.

The Changing Nature of Vocational Choice*

Traditionally vocational choices in America have been made early. "Don't you know what you are going to do?' and so each child was early urged to make a vocational choice. The assumption about such choices is that they should persist for life, that the one choice was a most significant one because it would influence all the rest of one's life. It was considered wise to get into a vocation and stick to it forever. These choices, of more recent years, were made mostly on the basis of aptitudes, and occassionally of interests, but the choice once made really determined who you were.

It has been particularly true in America that a person is known by his vocation. "Who is that chap over there?" and the answer is "Well he is a lawyer, or an agricultural engineer, or a plumber." The vocation was you. Who you were outside of your vocation was never given much attention because your life's vocation so influenced all that you were that it was you.

Here are some illustrations of this traditional way of life. This lovely little set of wood carvings that my wife and I collected somewhere[1] represents a stable husband and wife. What they have been they are, and they probably would look much like this all the rest of their lives. They were unchanging. The same thing is true of this next figure--the fisherman. He was probably born into his business--"of course" he was a fisherman. Here is a market girl from Haiti, born to do certain things, and being a market girl was probably her life. Here we have a family from Taiwan--the man born to be a herdsman, his wife born to be the wife of a herdsman, and the baby at the breast will probably be a herdsman, too. All of these represent a kind of stability growing out of what was a once-in-a-lifetime decision or choice--sometimes no choice at all, of course.

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[*] Prepared by Dr. C. Gilbert Wrenn, Professor of Counseling and Educational Psychology, Arizona State University for the 1967 Seminar in Distributive Teacher Education

[1] This paper was transcribed from an audio-video tape which was used for one of the two presentations, so the visual illustrations included in the text were those used before the camera.

The pictures we present now represent a random sample of young people today. The first of these is a couple whom I am calling Mr. and Mrs. Mod. They are developing a new city at Drop City, Colorado. They are a sophisticated young couple trying to do something deliberately with the business of living, although it is entirely unconventional and seems to lack the sense of responsibility that the past generation demonstrates. This next page represents some women from Hawaii--young women doing various things, women in the business of making a living in a variety of ways. Another page shows still younger people. Taken from a recent issue of LOOK, it presents a group of high school students who are in a music class conducted by dynamic Mr. Tinney, of Owatonna, Minnesota. Here you see young idealism, an open facing of an uncertain future, very different from the earlier pictures we saw of older people who faced a sure way of life.

For many reasons the traditional basis for making a vocational choice is out of the picture and young people face up to life differently. Three major kinds of change currently influence the making of a vocational choice.

Changes in the World of Work

The nature of the world of work in America and the meaning of work itself, are radically different today from anything in any country at any other time in history. Many of these differences in the work world are familiar to you and I will not belabor them. One difference of unusual significance is the place of women in our society, and the fact that women are in the business of living in jobs outside the home as well as being homemakers and possible mothers. This not only changes the family pattern, but changes the nature of the labor force, since the occupational demands of our nation are no longer dependent upon men. Recently I read, I think from the Women's Bureau in the Department of Labor, that 45 percent of all women, age 18-64, were engaged in part-time or full-time work outside the home. This same Woman's Bureau provides some figures based upon the fact that the average age of the bride today is slightly under 20. The average of these brides will have her last child at age 26, and by age 32 all her children will be in school. By this time she has some 44 years of her life ahead of her. What will she do with this life? Well, you know as well as I, that she will doubtless work outside the home as well as in. So from here on more women are having two careers and this makes one large difference in the whole picture of our occupational world.

In the second place, we are living in an affluent society in which financial security is much more certain than at any other time in our history. One has to earn a living to be sure, but the earning prospects are more assured than at any time, and so the need for vocational security in the sense of economic independence is less. There is, of course, a sizeable segment of our population who are living at a poverty level, and we haven't yet solved the inequality between the segments of our population. On the other hand, none of our young people of today have lived through the uncertainties of the 1930's. Even vocational uncertainties for those from poverty areas are much less because of community and government action. This lessened need for "a job at any price" affects both the urgency and the significance of the vocational choice.

Our society is influenced greatly by developments in both our science and our technology. New vocations are opening up in a fascinating fashion. Someone has estimated that the next generation will see 60 percent of the labor force in occupations that do not now exist. This unprecedented rapid change has some peculiar effects upon vocational choice. Many college students are satisfying their idealism and their resistance to the technological emphasis by choosing the social sciences and humanities. Many institutions report far too few choices in the sciences and engineering. Technological developments also mean that young people see many older people being phased out of their vocation and having to make new choices. In many occupations, age no longer makes a person more useful. If you are working on Model 600 and Mark 700 comes along, you are out of date and obsolescent at once unless you secure further training. Sometimes this further training is impossible and it means a new vocation.

This kind of rapid change has made young people concerned with "experience now," with planning for the future looking uncertain and unattractive. One dimension of this vocational "outdating" means that they look less to their elders for guidance and more to their peers. All of this changes the meaningfulness of work.

Some of you may know a book edited by Dr. Henry Borow, Man in a World at Work. This is the 50 year aniversary volume of the National Vocational Guidance Association, published by Houghton Mifflin in 1964. The book is devoted to analysis of the nature of the vocational world and with projections into the future. I have a chapter in this called "Human Values and Work in American Life" in which I outlined why the concept of work is changing for this generation. I suggested that the Protestant ethic of work, that work is a virtue regardless of its nature, is out-moded. Working hard at something--anything--is not adequate to get you ahead today. I propose a new ethic as follows: "The objective of work is to engage in an activity that has personal meaning for you, or which is seen by you as a contribution to society, whether you are paid for it or not." This ethic incorporates two "new" ideas about work--it must be meaningful for you and work which has meaning may not be the paid job.

It was only two or three centuries ago that the real significance of a man was what he did outside of earning a living. He was significant for his work in reforms, in art, in music, in political action, even dabbling in science. It is possible that we are again entering a period in which a man's feeling of significance may come from his non-employed life activities. This of course will not be true for people in the professions or other occupations in which there is a great deal of self-involvement. For increasing millions however, their occupation may be so structured, their contribution so much a small part of an unknown whole, the work so much that of a machine-watcher, that he will find it impossible to feel significance from his occupation alone. Of course, many are in that position now, but more will be I believe. This makes "vocational choice" a choice of a way of life, a vocation, a commitment, of which the occupation or paid employment is but a part.

Changes in Our Understanding of Human Behavior

We have come a long way in the past three or four decades but we are still quite ignorant of the meaning of many kinds of behavior. We have made progress, as I have suggested, and tentative truths help us to understand a little more about motivations and the reasons back of vocational choice.

The traditional approach to vocational choice, which is still the accepted approach for many, is that we measure one's aptitudes and traits and see how they fit into the world of occupational demands. Much of the emphasis in this approach rests upon measures of aptitudes or capacities or abilities. The purpose of this is to find out what a man can do and then see where the world of work needs this aptitude, so that the man can fit himself into his appropriate occupational niche. One of the things that we have discovered in the past two decades is why some people who have all the ability to do something still fail to achieve. It is common to blame such people and to feel that it is their fault that they are not succeeding. A student, for example, has ability to do good school work but doesn't. "He ought to succeed" because he has the ability to succeed.

The new key to understanding is that aptitude must be coupled with desire to use it, with motivation, with the person's seeing a reason for using his ability in the accepted manner. To aptitude knowledge we have added the extremely important factor of attitude. Motivation is still, however, a very complex dimension of behavior.

1. We have learned some things from psychoanalysis. There is some evidence to suggest that a young person identifies with a member of his family and looks for ways of living that will enable him to behave like that person. He is unconsciously attempting to be like a kind of person, and the vocational choice is influenced by this identification factor. Some very significant work has been done on this point by Dr. Edwin Bordin and his students at the University of Michigan, and Dr. Anne Rowe at Harvard. Working from somewhat different sets of assumptions, they come to a common conclusion that this identification factor in the early family life of the child influences the later vocational choice.

2. We have learned something from the needs theory of psychology, where the psychological needs of the individual affect the vocational choice made. One's needs for status, or power, or love, or for contributing to someone else, etc., are basic factors in the vocational choice made. Individuals of course may misread a vocation and what they think they will gain from it is not what they will gain, but the need to be met is basic to the choice.

A very interesting development in this same general direction has been made by Dr. John Holland, Director of Research for the American College Testing Service. Holland has, for the past ten years or more, developed a theory of vocational choice based upon a hierarchy of six life orientations, six ways in which one relates himself to the business of living. Through a careful analysis he has isolated what he terms the realistic, the intellectual, the social, the conventional, the enterprising and the artistic environments. For example, a vocation in the realistic environment would be that of an artisan or a carpenter, someone who worked with his hands and was concerned with things. A vocation in the intellectual environment would be represented by the scientist or anyone who dealt primarily with ideas. In the social environment would be the vocations of teacher, or social worker, those who deal with people. The conventional environment would be represented by the banker or office worker; the enterprising environment by the salesman, manager, politician; and the artistic environment of course would be the artist or the writer. More recently he has discovered additional factors such as the environment in which the primary factor is self-control, or is aggression, or is masculine, or calls for acquiescence. Each of these have their vocational counterparts.

In terms of this theory, each person establishes these environments in some form of hierarchy, which of course may change from period to period in his life, and identifies with someone in the first or second level of the hierarchy. He wants to be like that person, and his choice involves a search for identification in this kind of orientation.

Holland has done some very interesting research in this connection in which he finds that the occupational choices in the realistic and intellectual environments are the most stable, with the most changeable involving choices in the social environment. He then goes on to find that choices in the realistic and intellectual realms are influenced most by knowledge of self and achievements, whereas choices in the social environment are influenced by what other people think and expect the individual to do. It seems easy to see choices based upon self-knowledge and the awareness of past achievement would be more stable than choices based upon trying to please others.

3. Another area which influences choice is one's perception of one's self. How I see myself as I now exist, the kind of person I would like to be, how I think others see me, are important factors in what I choose vocationally. Donald Super has called attention to this over the years, in the belief that the occupation is chosen because it is a means for the person becoming the kind of person he wants to become. He may see himself "realistically" or not from some other person's point of view, but what he thinks he is or wants to be, influences his choice.

Recently, Dr. Jack Armstrong, Associate Dean of Macalester College, did a study on vocational self-perception versus general self-perception. He found that the self seen in a vocational context was closer to one's ideal self than to one's concept of "real" self, one's how he presently sees himself. This seems added evidence that a person looks to his vocation to help him become the kind of person he wants to become.

Because of the audience to which this paper is addressed two recent studies might be mentioned. In one study made by the American College Testing Service of 1,000 men and 500 women, those who had chosen business occupations were less intellectual, less scientific, less artistic, and less original in their tendencies, than other groups of students. On the other hand they were more aggressive, with more leadership in athletics, wanted to be mature, wanted to be well-liked, wanted to have time to relax and enjoy life, and were not particularly academic. The above is true of both men and women who had chosen the business occupations. A second study made by Helen Astin and reported in the Journal of Counseling Psychology, March, 1967, was a study of college freshmen in 1965. Those who chose business occupations were identified by early choice, low language and literature interests, high on English scores, high on factors of tolerance and autonomy. From such theories and studies as these we are beginning to understand a little better the complex of psychological factors that enter into vocational choice.

Changes in the Process of Counseling

A story that I have always liked is about the little girl, who, after her first two days at school, asked her mother a question which proved embarrassing. She had simply asked "How was I born?" but the mother was caught off-guard and didn't know quite how to answer. As a consequence she fell back on the old fairy story and said "Well, dear, a stork brought you to our house." The little girl came back immediately with: "Mother, how were you born?" The mother was caught in the toils of her own deceit by this time and said, "Well, dear, a stork brought me to Grandma's house." The little girl asked, "Well, was Grandma born the same way?" "Ye-e-s, yes, dear, she was." The little girl pondered for a moment and then replied, "Well, it seems strange, but apparently there hasn't been a normal birth in our family for three generations." This suggests that one should never underestimate the sophistication of little girls or of professional audiences. So I shall try not to labor the obvious about counseling.

1. It should be clear from what I said earlier, that when you are helping a person in the process of making a vocational choice, the activities that he will consider must have personal meaning to him. It must seem worthwhile to him, meet some psychological need, contribute to his becoming the kind of person he wants to be--all of this in addition to providing him with an adequate monetary return.

2. The choice now made must be considered as in a sequence of choices, it is no longer made once and for all. The individual must be prepared for the impact of change upon his choice, change in his knowledge of himself, change in his knowledge of the world.

3. Girls need particular kinds of counseling because increasingly they are preparing for two careers, one in the home and one outside the home.

4. Most individuals will have to continually return for some sort of schooling in order to meet the demands of the occupational world. School will never literally be completed, it is for always.

One of the developments in the process of counseling is an awareness of the need to help the person to classify his goal or purpose, and to help him to develop certain kinds of behavior that lead to that goal. For the first of these purposes, one might operate with an open-ended approach in which the client makes the moves with the counselor as a facilitating agent. In the second instance, you might use the principle of reinforcement to help his behavior move in the direction of the kind of behavior which he wants to develop. Counseling means knowing something about the psychology of self-perceptions, needs, and drives, and something about the psychology of behavior change.

It is most important that those who counsel see themselves as on trial by those who come to them for help. There is frequently a distrust of any adult by a young person, an uncertainty about how much the younger can trust the older. Part of this trust grows out of how much the adult is ready to understand him in terms of meanings that have significance to the youth. There is a fascinating small paperback by Dr. Sidney Jourard entitled The Transparent Self. In this he proposes that human relationships are enhanced by the extent to which one person attempts to disclose himself to others, to appear before the other as he really is, to become somewhat more transparent, to have less defensive and role-playing behavior. Although you take a risk when you trust the other person with this knowledge of you, the chances are that the more you trust him the more he will trust you.

The whole business of counseling is tied up with who you are, not merely what you do. The job of counseling is to enlarge on one's capacity to trust one's self which leads to having increased confidence in the other person. A considerable amount of research suggests that only one who trusts himself will trust others. The counselor who has confidence in the client's ability to think, to assume responsibility for himself, to possess individual integrity, is likely to be one who has these same qualities within himself. The uneasy counselor, the person who wants a "correct" response, of which he, the counselor, can approve, the individual who is unwilling to take a risk with a client or allow the client to take a risk, is not a helpful and may be a harmful counselor. All too frequently the counselor wants an answer from the student about which he, the counselor, can feel "easy." The decision, however, is one that the student must make and for which he must assume responsibility. He needs a counselor who can trust him and can trust his ability to re-choose if he makes a mistake.

A common error is to equate counseling with teaching, when teaching is seen as telling, informing, instructing. When this assumption is made by the teacher-counselor the instructional process on the part of the teacher dominates. Any attempts on the part of the student to feel his own way or to talk in stumbling accents about things that he is gradually becoming to understand, bothers the teacher-counselor because he "knows" the good answers. Perhaps counseling is learning, but it is different from instruction in the classroom where the learning involves concepts and situations exterior to the student, something in the student's world but not the student. In counseling the subject matter of the learning is the person of the student himself, his feelings and self-perceptions. Sometimes the "subject matter" is the relationship between the counselor and the student. This means that counseling is a kind of living, of experiencing, of relating to another person, which is quite different than just telling. Most teachers who attempt to counsel students find it easier to talk than to be, easier to pace the interview to their comfort than to the pace of the student struggling with himself.

Reacting to Change

I have been suggesting that changes in society, in our knowledge of the person, and in our knowledge of counseling, are rapid and strenuous. Often change in the life of an adult becomes very painful. Changes in our understanding of society's demands and of the nature of behavior are painful, because to accept them means that we must change. So we set up certain defenses against accepting change--change in the economic structure, in the relation of the government to the person, in the nature of the family, in how young people think differently from adults, in the fact that they depend more upon peer judgments than upon ours. These changes are very hard for us adults to accept so we deny the reality, distort it, or forget it.

Some of us have such a concern for the young person that we are reluctant to admit that the whole business of being young now is not to be so sure of the past, but to be deeply concerned with the present and to admit our uncertainty about the future. If we set up our defenses against accepting what thus seems so realistic to the young, we are likely to be ineffective counselors. We will be fighting windmills that do not exist, and missing the young person's dragons that do exist.